

Cyberbullying and its effects on the mental well-being of adolescents

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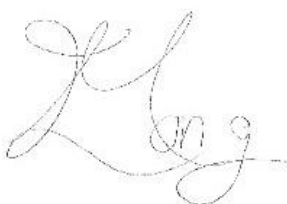
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Statement

I, the undersigned, hereby declare that the work contained in this dissertation is my own original work and that I have not previously submitted it to any other university for a degree.

A handwritten signature in cursive script, appearing to read 'L. Long', is centered on the page.**Signature**

9 December 2019

Date

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Abstract

Studies investigating the effects of cyberbullying on the mental well-being of adolescents are needed to guide the development of preventive and protective measures for cyberbullying. Although a substantial number of studies have been undertaken on the prevalence of cyberbullying, research describing the effect of cyberbullying on the mental well-being and level of major depression among adolescents (for both the victim and the bully) are inconclusive for the South African context. This study was subsequently conceptualised based on a bio-ecological perspective that focuses on the hypothetical interrelationship between cyberbullying, adolescence, mental well-being and major depressive disorder. The main objective of this study was to determine the prevalence and nature of cyberbullying and its effect on and relationship to mental well-being among adolescents in the Matlosana municipal area (Dr Kenneth Kaunda district, North West province, South Africa).

This quantitative research study was situated in a post-positivistic research paradigm. A survey design (which included the adapted Daphne Cyberbullying Questionnaire, the Mental Health Continuum Short Form and the Patient Health Questionnaire-9) was used to reach the aims of this study. A stratified random sampling procedure was initially used to identify participating schools, where after an availability sample was used. The sample group consisted of **187 (n)** Grade 8 to 11 learners in the Matlosana municipal district in the North West province. The resulting data were analysed using descriptive statistics. Since the sample was an availability sample and not representative of the Matlosana district, generalisations to the rest of South Africa could not be made.

The data analysis and interpretation included statistics pertaining to findings on adolescents' experience of the school environment, the nature of electronics use among adolescents, the prevalence of cyberbullying and traditional bullying and the relationship between cyberbullying and traditional bullying; findings related to demographic differences with regard to cyberbullying and the nature of cyberbullying among adolescents, and lastly, findings on the effect of cyberbullying on the level of major depression and the mental well-being of the group involved in cyberbullying (both victims and bullies).

The most prominent conclusions were that cyberbullying was definitely prevalent among this sample group and among South African adolescents, *but* cyberbullying is not a loose standing problem as it seems to be tied with traditional bullying. Yet, the anonymity and unbounded audience factors that make cyberbullying unique, contribute to the problem. Both cyberbullies and -victims in this sample suffered from major depressive disorder and they did not experience optimal mental well-being. Major risk factors of cyberbullying involvement included extensive, unrestricted and unsupervised use of electronics. It seems that adolescents need help with socialisation and relationship forming, as well as with developing useful protective strategies when they do come across cyberbullying.

The study contributed to the body of scholarship on the prevalence and nature of cyberbullying and its effects on the mental well-being of adolescents (victims and bullies). The research extends the knowledge about the relationships between cyberbullying and mental well-being and cyberbullying and major depressive disorder. Various role players, such as adolescents (victims and bullies), schools, teachers, the Department of Education and parents will benefit from this study since a health promoting school approach towards online protection is recommended.

Key terms: cyberbullying (aggression, bully, school violence, traditional bullying, victim), adolescence, mental well-being (emotional well-being, psychological well-being, social well-being), mental illness (major depressive disorder), health promoting school

Opsomming

Studies wat die effek van kuberboelie op die geesteswelstand van adolessente ondersoek word benodig ten einde voorkomings- en beskermingsmaatstawwe vir kuberboeliery te ontwikkel. Alhoewel 'n beduidende aantal studies al onderneem is oor die voorkoms van kuberboeliery, is daar nie afdoende bevindinge oor die effek van kuberboeliery op die geesteswelstand en vlakke van major depressie onder adolessente (beide die slagoffers en die boelies) in Suid-Afrika nie. Hierdie studie is gekonseptualiseer met 'n begroning in die bio-ekologiese perspektief met die klem op die hipotetiese verbande tussen kuberboeliery, adolessensie, geesteswelstand en major depressie. Die hoofdoelwit van die studie was om die voorkoms en aard van kuberboeliery te bepaal, en om die effek daarvan op en verhouding daarvan met die geesteswelstand van adolessente in die Matlosana munisipale gebied (Dr. Kenneth Kaunda distrik, Noordwesprovinsie, Suid-Afrika) te ondersoek.

Hierdie kwantitatiewe navorsingstudie is geanker in 'n post-positivistiese paradigma. 'n Opname-ontwerp (met insluiting van die aangepaste *Daphne Cyberbullying Questionnaire*, die *Mental Health Continuum Short Form* en die *Patient Health Questionnaire-9*) is aangewend om die doelwitte van die studie te bereik. 'n Gelaagde, ewekansige steekproefprosedure is aanvanklik gebruik om die deelnemende skole te identifiseer, waarna 'n beskikbaarheidsteekproef gebruik is. Die steekproef het bestaan uit **187 (n)** Graad 8- tot 11-leerders in die Matlosana munisipale distrik in die Noordwesprovinsie. Die data is geanaliseer met gebruik van beskrywende statistiese analise. Aangesien die steekproef 'n beskikbaarheidsteekproef was en dus nie verteenwoordigend is van die Matlosana-distrik nie, kan geen veralgemenings gemaak word nie.

Die data-analise en -interpretasie het statistieke gelewer wat verband hou met bevindinge rakende adolessente se ervaring van die skoolomgewing, die aard van tegnologiegebruik onder adolessente, die voorkoms van kuberboelie en tradisionele boelie en die verhouding tussen kuberboelie en tradisionele boelie; bevindinge oor demografiese verskille met betrekking tot kuberboelie en tradisionele boelie en die aard van kuberboelie onder adolessente; en laastens bevindinge met betrekking tot die effek van kuberboelie op vlakke van major depressie en die geesteswelstand van die groep wat betrokke is by kuberboeliery (beide slagoffers en boelies).

Die mees prominente gevolgtrekkings is dat kuberboeliery definitief 'n hoë voorkoms het onder die teikengroep en onder Suid-Afrikaanse adolessente oor die algemeen, *maar* kuberboeliery is nie 'n losstaande probleem nie aangesien dit 'n noue verbintenis met tradisionele boeliery het. Die einste anonimiteit en matelose gehoor wat die faktore is wat kuberboeliery uniek maak, is die dinge wat tot die probleem bydra. Beide boelies en slagoffers in hierdie steekproef het aangedui dat hulle aan major depressie lei en nie optimale geesteswelstand ervaar nie. Die hoof risikofaktore vir kuberboelie betrokkenheid is omvattende, onbeperkte en ongekontroleerde tegnologiegebruik. Dit blyk asof adolessente hulp nodig het met sosialisering en verhoudingvorming, asook met die ontwikkeling van bruikbare beskermingstrategieë vir wanneer hulle met kuberboeliery gekonfronteer word.

Die studie dra by tot die beskikbare navorsing oor die voorkoms en aard van kuberboeliery en die effek daarvan op die geesteswelstand van adolessente (slagoffers en boelies). Die navorsing verbreed die kennis van die verhouding tussen kuberboeliery en geesteswelstand en kuberboeliery en major depressie. Verskeie rolspelers, soos adolessente (slagoffers en boelies), skole, onderwysers, die Departement van Onderwys, en ouers kan baat by hierdie studie aangesien 'n benadering tot aanlynveiligheid wat fokus op gesondheidsbevorderende skole aanbeveel is.

Sleuteltermes: kuberboeliery (aggressie, boelie, skoolgeweld, tradisionele boeliery, slagoffer), adolessensie, geesteswelstand (emosionele welstand, sielkundige welstand, sosiale welstand) geestesongesteldheid (major depressie), gesondheidsbevorderende skool

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List of Abbreviations

CB	Cyberbullying
EWB	Emotional well-being
HPS	Health Promoting Schools
MDD	Major depressive disorder
MWB	Mental well-being
PWB	Psychological well-being
SADAG	South African Depression and Anxiety Group
SGB	School Governing Body
SWB	Social well-being
WHO	World Health Organisation

CHAPTER 1

OVERVIEW AND RATIONALE

1.1 INTRODUCTION

Bullying is probably as old as humanity itself, and it has been part of adolescents' lives for generations. However, the present generation find themselves amidst a shift that brings them to uncharted terrain: bullies have come to use technology to reach more victims and to increase harm (Hinduja & Patchin, 2019). Social media use forms a crucial part of adolescents' culture, their education, and ultimately their lives (Allen, Ryan, Gray, McInerney, & Waters, 2014) – something that was unheard of two decades ago. As much as technology can contribute positively, it makes adolescents vulnerable. Countless adolescents across the world are vulnerable to **cyberbullying (CB)** because they have access to electronics and others opt to use it maliciously towards them (Hinduja & Patchin, 2019). Due to their developmental phase, some adolescents struggle with poor decision making. Research has revealed that adolescents take more risks than younger children or adults (Cohen-Almagor, 2018).

Given the developments described above, this study explores the effect of CB on the **mental well-being (MWB)** of adolescents from an eco-systemic and Positive Psychology perspective. This chapter provides a concise overview of the study by giving the rationale for the research, followed by the problem statement, gaps in the literature and the context of this study. This is followed by the research questions, aims, objectives and hypotheses that guided this study. A theoretical framework is presented to clarify the possible hypothetical interrelatedness between the main concepts in this study and to display the overarching theoretical lens that directed this study. Lastly, the research design and methodology, ethical procedures and considerations relevant to this study and the possible contribution of the study are briefly outlined. More in depth information on each aspect of the study will be given in the chapters that follow hereafter.

1.2 RATIONALE FOR THE STUDY AND THE RESEARCH PROBLEM

Chadwick (2014) states that adolescents today are known as “*digital natives*” since they have only known a world where digital communications technology exists. This global village of digital interaction can be regarded as an eco-system in itself, because people interact with each others on various eco-sytemic levels (Bronfenbrenner, 1979). This interaction will be further discussed in the theoretical framework (see 1.7). In their work,

Batterbee (2014) and Chadwick (2014) point out how the availability of various devices such as smart phones, tablets, personal digital assistants, notebooks and smaller laptops allows for relatively effortless internet access to most people. Currently, numerous children have access to cell phones, the internet and other electronic and digital media. In fact, one third of internet users worldwide are under 18 years of age (UNESCO, 2017). In the USA, 95% of adolescents have access to the internet and the greatest majority of these adolescents can access the internet on their mobile devices (Hinduja & Patchin, 2019). A recent study conducted in South Africa found that 70,4% of children and adolescents make use of the internet and 46% can use it whenever they need or want to do so (Burton, Leoschut, & Phyfer, 2016). Ditch the Label (2017) conducted a study with 9- to 17-year-olds and found that younger children had less access to the internet than older ones. This access leaves adolescents open to CB.

Various researchers from different parts of the world have investigated the extent, prevalence, and nature of CB and its impact on adolescents. EU Kids Online conducted a quantitative survey in 25 European countries and found that 6% of adolescents between the ages of 9 and 16 years have experienced some form of CB and 3% admitted that they have cyberbullied others (Hasebrink, Görzig, Haddon, Kalmus, & Livingstone, 2011). Vodafone (2015) conducted a global survey in which 4720 adolescents between the ages of 13 and 18 years old from eleven countries participated. This study found that 18% of the participants have been cyberbullied, 51% think CB is worse than offline bullying, 41% have friends or family that have been cyberbullied, 43% think CB is a bigger problem than drug abuse, 41% said CB made them feel depressed and 18% of those cyberbullied had suicidal thoughts.

Hinduja and Patchin (2018) portray the prevalence of CB in the USA by summarising the results of ten recent studies they conducted. Following the trend, 28% of learners in these American studies informed the researchers that they have been cyberbullied at some stage and 16% of the respondents declared that they have cyberbullied someone else before. CB prevalence increases yearly. Hinduja and Patchin (2019) found that 33,8% of 5 700 high school participants had been cyberbullied and 11,5% revealed they have cyberbullied others during their lifetime. Interesting to note, not all adolescents perceived CB as a problem or as abnormal. In a study by Lindfors, Kaltiala and Rimpelä (2012), very few participants considered CB as a distressing factor in their lives, which of course allows the problem to continue undetected.

CB seems to be a global phenomenon, and cases of CB have also been identified in South Africa. In studies conducted by Burton and Mutongwizo (2009) and De Lange and Von Solms (2012), it was found that 36% to 37% of the adolescents surveyed have experienced some form of CB. The findings of a study by Tustin and Zulu (2014) revealed evidence of CB among learners in Gauteng: 35,8% of the participants have received insulting messages; 25,6% have experienced gossiping and that rumours had been spread about them; 23,4% have been called names; 20,2% experienced that the bully forged information about them, and 11,7% have been intimidated online. Other experiences included sexual remarks (8,5% reported exposure) and circulation of the victims' photographs and videos online (5,9%). Ipsos Public Affairs conducted a global CB survey in 28 countries with 20 793 parents also participating. South Africa was one of the participating countries (Newall, 2018). Parents were asked if they knew a child in their community that have experienced CB, 54% South African parents reported that they did. This is much higher than the 33% average of the 28 countries. Of the South African participants, 25% reported that their own children have been cyberbullied. CB prevalence in South Africa can therefore not be ignored. It is a phenomenon in need of further investigation.

Vieira, Rønning, Mari, and Bordin (2019) warn that the existence of "polyvictims" (those experiencing both CB and **traditional bullying** should not be ignored either. Polyvictims experience victimisation in more than one environment. Hasebrink et al. (2011) state that there is a definite link between the prevalence of CB and traditional bullying. These scholars found in their study that 56% of cyberbullies admitted to having bullied others offline as well, and 55% of online victims disclosed that they have also been victims of some kind of traditional bullying. In the study conducted by Burton and Mutongwizo (2009), more than two thirds (69,7%) of cyberbullies stated that they have been traditionally bullied before. Vieira et al. (2019) found in their study that 1,9% of the adolescents had been victims of CB, and 21,9% had been victims of physical aggression, verbal harassment and/or social manipulation by peers.

Apart from being cognisant of the prevalence of CB and the link between CB and traditional bullying, the psychological impact of CB also needs attention. Various studies such as that of Brailovskaia, Teismann and Margraf (2018); Cross, Lester and Barnes (2015); Healy and Lynch (2013); Lucas-Molina, Pérez-Albéniz, Fonseca-Pedrero and Giménez-Dasí (2018); Cowie (2011) and Tokunaga (2010) demonstrate that there is a positive relationship between CB and psychological problems or mental illness among adolescents. Many victims

state that they feel depressed, sad, angry and frustrated because of exposure to CB (Hinduja & Patchin, 2019). Regardless, certain limitations remain in this research field, such as knowledge about the long-term effect CB might have on adolescents' well-being (Chadwick, 2014).

Attention to CB has been renewed due to the connection between CB and suicidal thoughts and suicide among youths. This has raised concerns about the prevalence of CB and the psychological impact it has on its victims (Schneider, O'Donnell, Stueve, and Coulter, 2012; Field, 2018). There have been a number of suicide examples in the United States. Closer to home, a 13-year-old girl from Pretoria, South Africa, committed suicide after being bullied on a WhatsApp group (Gous, 2019). The psychological effect of CB differs from that of traditional bullying and is frequently experienced as far worse because the bullying can be anonymous, the victimisation can go viral and the bullying may be more callous due to the physical distance between the bully and the victim. The bully cannot see the victim's response (Badenhorst, 2011; Hinduja & Patchin, 2019). In the study of O'Brien and Moules (2013) on the negative impact of CB on the MWB of adolescents, 12,7% of the participants said that CB affected them very much, 51,9% said that CB affected them moderately and 21,5% said that CB only affected them a little. This is somewhat surprising, as one would have expected the impact of CB to have been experienced much more intense than was reported here. Apart from the effect of CB on victims' MWB, it also appears as if the MWB of the bully themselves plays a role. According to Anti-bullying Alliance (n.d.), bullies possibly cyberbully others because they struggle with mental health issues and experience emotional distress.

In light of the above, it is evident that traditional bullying cannot easily be excluded when one investigates the prevalence of CB, nor can one focus only on the victim. The stance of the bully and the cyberbully-victim (a person interchangeably fulfilling the role of bully and victim) should be explored as well. Furthermore, the victim *and* the bully may suffer from **major depressive disorder (MDD)** – the number one reason for suicide among adolescents (Cohen-Almagor, 2018). Depression and anxiety may be predictors of CB involvement. Nonetheless, it may also be consequences of being bullied (Kowalski, Giumetti, Schroeder & Lattanner, 2014). However when people do not suffer from MDD, it can not be assumed that their MWB is optimal. From such a perspective Positive Psychology theory makes sense, because when mental illnesses are non-existent, it does not necessarily imply that mental health is present. On the contrary, if mental illness exists, it does not necessarily

imply the absence of mental health. Gilman et al. (2009) agree with this notion and argue that research on optimal functioning goes beyond the typical focus in psychology on “what goes wrong” in humans. In this regard little is known about the mental health and emotional well-being of the bully and is worth while to explore.

The treacherous and unknown terrain of CB described above makes it worth exploring the prevalence of and the impact CB has on adolescents’ MWB, and to investigate to what extent CB heightens depression among adolescents or occurs due to heightened depression, especially within the South African context.

1.3 CONTEXT OF THE STUDY

Given the dearth of research on CB in a South African context, this study took place in the North West province of South Africa at five secondary schools situated in the Matlosana municipal district. CB affects people of all ages, but adolescents form a vulnerable population. Therefore, this study focused on adolescents in the age group 13 to 18 years (Grade 8–Grade 11 learners).

1.4 RESEARCH QUESTIONS

In light of the above, the primary research question for this study was: *What is the prevalence and nature of CB and its effect on and relationship with the MWB of adolescents in the Matlosana municipal area (Dr Kenneth Kaunda district, North West province, South Africa)?* The following secondary questions emanated from the main research question:

- How do adolescents in the Matlosana municipal area experience their school environment?
- What is the nature of the electronics use among adolescents in the Matlosana municipal area?
- What is the prevalence of traditional bullying and CB among adolescents in the Matlosana municipal area?
- Is there a relationship between traditional bullying and CB?
- Are there any differences in gender, age, disability and sexual orientation with regard to the prevalence of CB among adolescents in the Matlosana municipal area?
- What is the nature of CB among adolescents in the Matlosana municipal area?

- What is the effect of CB on the level of depression of adolescents in the Matlosana municipal area?
- What is the effect of CB on the aspects of MWB (hedonic well-being and eudaimonic well-being) of adolescents in the Matlosana municipal area?

1.5 AIM AND OBJECTIVES OF THE STUDY

The primary aim of this research was to determine the prevalence and nature of CB and its effect on and relationship with the MWB of adolescents in the Matlosana municipal area (Dr Kenneth Kaunda district, North West province, South Africa) via a literature review and empirical research. The objectives were to determine:

- how adolescents in the Matlosana municipal area experience their school environment;
- the nature of electronics use among adolescents in the Matlosana municipal area;
- the prevalence of traditional bullying and CB among adolescents;
- whether a relationship exists between CB and traditional bullying;
- whether there are differences in gender, age, disability and sexual orientation with regard to the prevalence of CB, focusing on both the victim and the bully;
- the nature of CB among adolescents in the Matlosana municipal area;
- whether a relationship exists between CB and major depression disorder (MDD), focusing on both the victim and the bully; and
- whether a relationship exists between CB and aspects of MWB (hedonic well-being and eudaimonic well-being), focusing on both the victim and the bully.

1.6 HYPOTHESES

The aim and objectives were addressed in the form of research questions rather than formal hypotheses that correspond directly with random sampling and inferential statistics, since the sample was an availability sample, even though stratified sampling was initially used (Steyn, Smit, du Toit & Strasheim, 1999).

1.7 THEORETICAL FRAMEWORK

This study is conceptualised from a bioecological perspective (Bauman, 2014) that focuses on the theoretical interrelationship between CB, adolescence and MWB or poor mental health. The hypothetical interrelationship between the concepts of this study is presented in Figure 1.1 below. The fundamental concepts related to this study are clarified in the remaining chapters. *CB* (aggression, school violence and traditional bullying) and *adolescence* are discussed in Chapter 2, and *MWB* and *mental illness – MDD* in Chapter 3.

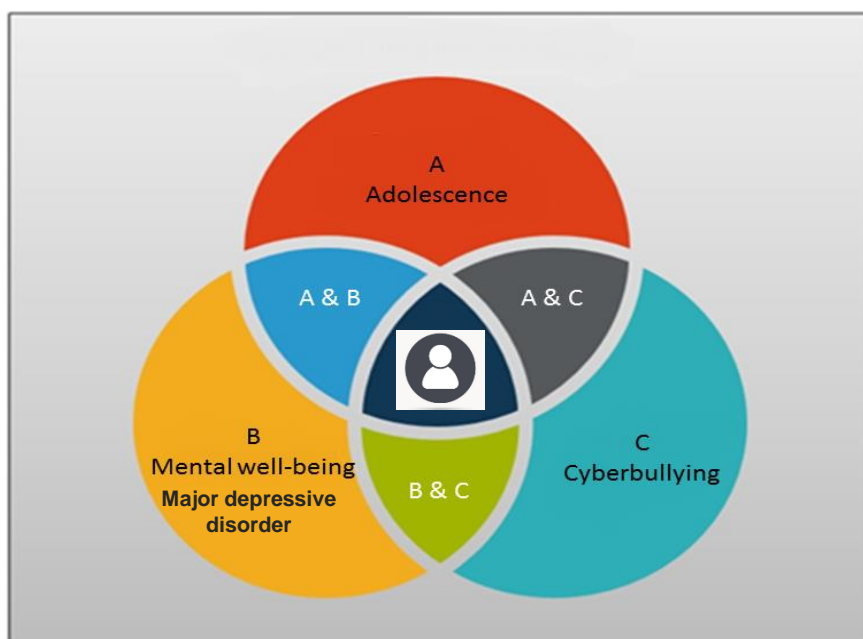


Figure 1.1: The hypothetical interrelationship between CB, MWB, MDD and adolescence.

For the purpose of this study, the individual depicted in the middle represents the Grade 8 to 11 learner. The blue area (A and B) illustrates that most adolescents strive for well-being during their adolescence. The grey area (A and C) illustrates that adolescence is a predisposing factor for CB engagement. The green area (B and C) illustrates that a life challenge such as CB could affect an adolescent's MWB and level of depression. Apart from the interaction between these components, the adolescent lives within a complex environment at a certain time, and therefore a bioecological perspective is needed.

Various authors have worked from a bioecological perspective towards a better understanding of CB. They focused on aspects such as children's internet usage (O'Neill, 2014); adolescents' victimisations (Sabri, Hong, Campbell & Cho, 2013); CB behaviours

(Cross, Barnes, Papageorgiou, Haswen, Hearn & Lester, 2015) and prevention of youth bullying, aggression and victimisation (Espelage, 2014). Since bullying occurs within a societal context, one should not approach this problem with a narrow lens. The approach should concentrate on the individual (victim and bully), but also consider the reciprocal influence that family, peers, schools and culture have on the phenomenon (Bauman, 2014). Smit (2015) states that CB affects the education system as a whole, since it not only affects the individual learner, but it undermines school climate and hinders overall school functioning. Bronfenbrenner's bioecological theory of human development is a suitable theoretical lens for this research study since it could enrich our understanding of CB (Bauman, 2014).

Urie Bronfenbrenner started his work on his theory of human development in the 1970s and continued until his death in 2005. During this time, his theory went through different phases (Rosa & Tudge, 2013). Phase 1 commenced in 1973 and ended in 1979 after the publication of his book "The Ecology of Human Development" (Rosa & Tudge, 2013). Bronfenbrenner (1979, p.21) explains the ecology of human development as follows:

The ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts within which the settings are embedded.

Rosa and Tudge (2013) explain that during Phase 2 (1980–1993) Bronfenbrenner made modifications to his theory by paying more attention to developmental processes and the role of the individual. In Phase 3 (1993–2006), Bronfenbrenner expanded his ecological model to a bioecological model—the process–person–context–time (PPCT) model—in 1998. The PPCT model emphasises the active role a person plays in his or her own development by means of *proximal processes*. Proximal processes can be explained as forces that drive human development.

In order to understand the bioecological human development model of Bronfenbrenner, one should understand his view that there is a mutual interaction between the developing person and the environment in which he or she is living and growing (O'Neill, 2015). This research study only focused on the contextual factor of Bronfenbrenner's model,

which includes the five environmental systems that concurrently influence the developing individual in some or other manner (Feldman, 2014). These systems range from small settings in which the individual directly interacts with his or her environment, to larger settings that indirectly influence the developing person (Ettetal & Mahoney, 2017). The systems are organised in levels that are called the microsystem, mesosystem, exosystem, macrosystem, and the chronosystem (Feldman, 2014). Figure 1.2 shows how Bronfenbrenner's model applies to this study.

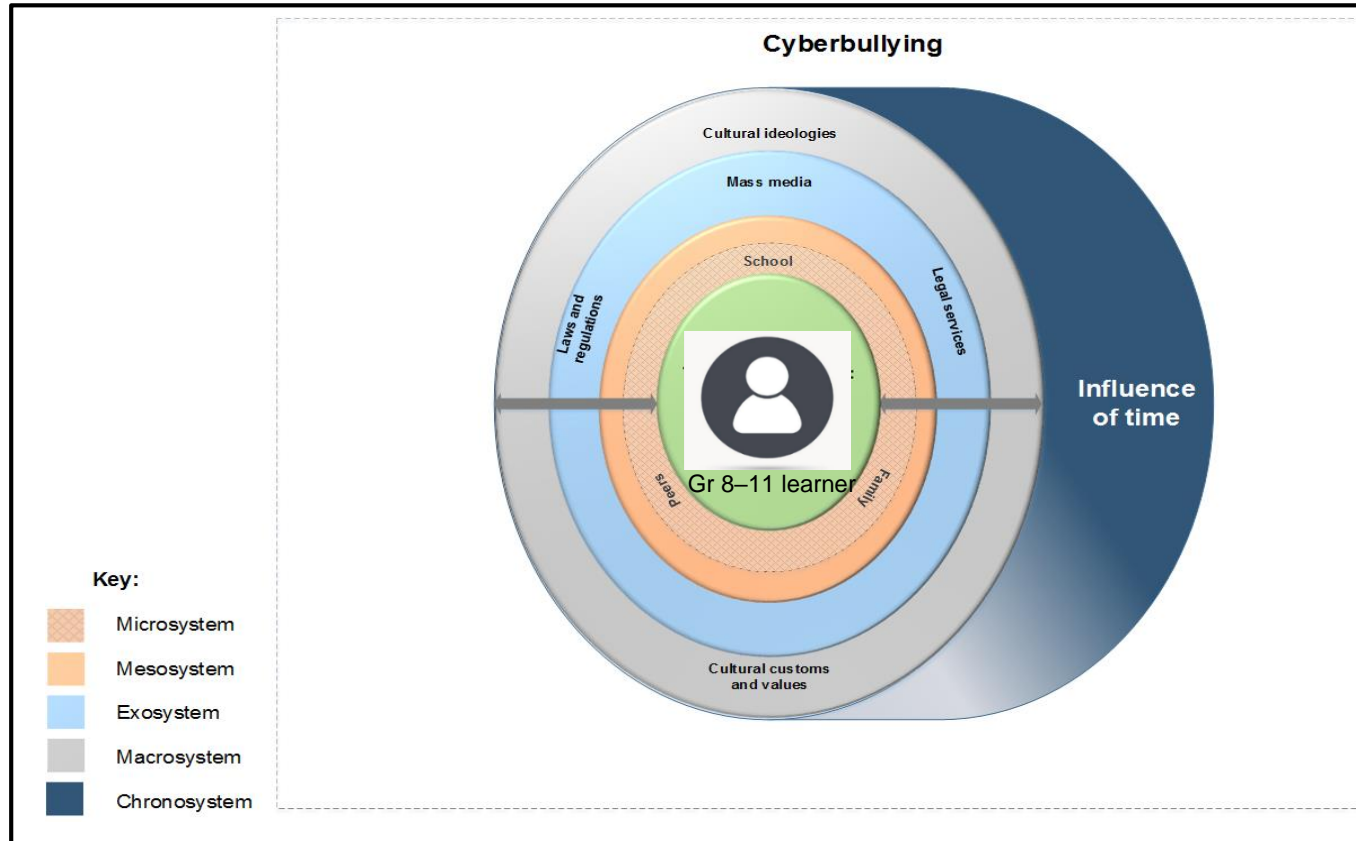


Figure 1.2: Bronfenbrenner's ecological theory of development: Application to the study (Santrock, 2010, p.33).

As indicated in Figure 1.2, CB spans *all of the systems* and it involves the victim, bully or bystander and peers (*microsystem*), the CB experiences in relation to family and school experiences (*mesosystem*), the digital media context (*exosystem*), the influence of culture on CB (*macrosystem*) and how time influences technology (*chronosystem*). Table 1.1 presents a description of the different environmental levels and their application to the study.

Table 1.1:

Bronfenbrenner's Five Environment Levels (Feldman, 2014; Hoare, 2008; O'Neill, 2015; Rosa & Tudge, 2013; Santrock, 2010)

Environmental level	Description	Application to the study
Individual	The personal characteristics an individual takes with him or her into social situations (e.g. age, gender, skin colour, physical appearance, past experiences, skills, intelligence, social and material resources, temperament, motivation and persistence).	<p>The adolescent (the Grade 8 to 11 learner).</p> <p>The study uses the multidimensional and developmental models relevant to adolescence to explain why adolescence is a predisposing factor for CB engagement (see 2.3.2).</p> <p>The physical (2.3.2.1), cognitive (2.3.2.2), personality (2.3.2.3) and social (2.3.2.4) development of adolescents are explained.</p> <p>The MWB of the adolescent forms part of the individual (the Grade 8 to 11 learner) as well. MWB (3.2), mental illness (depression) (3.3) and the effect CB has on adolescents' MWB and level of depression (3.4) are discussed.</p>
Microsystem	The direct relationship between the developing child and his or her immediate environment: e.g. home (family), neighbourhood, health services, churches, caregivers, friends and teachers.	The study offers an overview of adolescent relationships: parent–adolescent relationships (2.3.2.4.2), peer group relationships (2.3.2.4.3) and school relationships (2.3.2.4.4)
Mesosystem	The interrelationship between two or more microsystems that involve the developing child (e.g. family experiences to peer experiences). The child is an active participant in this system.	Falls outside the scope of the study

Environmental level	Description	Application to the study
Exosystem	Broader societal influences: neighbours, friends or family, local government, laws and regulations, the community, schools, social welfare services, legal services, the economy, mass media. The child is not an active participant in this system, but the system affects him or her in some ways.	Legal aspects (laws, regulations and available legal services) related to CB (2.2.4)
Macrosystem	Cultural influences on an individual, such as ideologies, views, customs and folkways.	Falls outside the scope of the study
Chronosystem	The way in which time affects children's development.	Role of the digital media context (2.3.2.4.5)

1.8 RESEARCH METHODOLOGY

In pursuit of an answer to the main research question, the study included a literature review and empirical research. A *quantitative survey design* (which included three questionnaires) was deemed the most suitable empirical research design to reach the aims of this study. Maree (2016) defines quantitative research as “a process that is systematic and objective in its ways of using numerical data from only a selected subgroup of a universe (or population) to generalise the findings to the universe that is being studied” (p.145). Quantitative research can be either experimental or non-experimental. This study is non-experimental since it is a descriptive study. A post-positivist research approach guided the study.

1.8.1 Research approach

This study followed a post-positive research approach in an effort to provide an accurate description of the phenomenon under study. The main aim of research that adheres to the post-positivism paradigm is to make predictions, to test theories and to find correlations between variables (Chilisa & Kawulich, 2012). Guba and Lincoln (2005) identify four basic belief systems that define a paradigm: *axiological*, *ontological*, *epistemological* and *methodological* beliefs. The beliefs associated with this study’s post-positivist paradigm is outlined below in Table 1.2

Table 1.2:

Post-positivist Beliefs (Guba and Lincoln (2005) and Mertens, 2015, p.11)

Basic beliefs	Description	Post-positivism
Axiology	The nature of ethical behaviour	Respect privacy; informed consent; minimise harm (beneficence); justice/equal opportunity
Ontology	The nature of reality	One reality; knowable within a specified level of probability Critical realism and social constructivism
Epistemology	The nature of knowledge and the relationship between the knower and the would-be-known	Objectivity is important; the researcher manipulates and observes in a dispassionate, objective manner

Methodology	In which way does the knower go about to obtain the desired knowledge and understanding?	The researcher opted for a quantitative survey design
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In Chapter 4 the post-positivistic paradigm and the basic beliefs associated with the paradigm (4.2) are discussed in more depth. The research design and methods are briefly discussed next.

1.8.2 Research design and methods

A research design refers to the plan that would be followed to study a topic, and in order to formulate this plan, the researcher has to make certain decisions (Crotty, 1998). Survey designs are often used in social sciences (De Vos, Strydom & Fouché, 2011) to provide descriptions of phenomena. This design was used in this study because surveys have distinctive characteristics: the samples are typically big, many variables can be measured and several possibilities can be evaluated (Maree, 2016).

1.8.3 Sampling

A stratified random sampling procedure was initially used to identify participating schools. Learners were invited to participate in the study as volunteers, thus an availability sample was used eventually. The recruitment process of this study consisted of three phases (see Figure 4.1) to enhance the response rate: an initial process, a first amendment and a second amendment. These processes are discussed in depth in Chapter 4 (4.3.1).

The study population consisted of **3 532 (N)** Grade 8 to 11 learners in the Matlosana municipal district of the North West Province. The sample group consisted of **187 (n)** learners, of which 54% were female and 46% were male. The age groups were presented as follows: 13 (3%), 14 (20%), 15 (16%), 16 (18%), 17 (15%), 18 (5%) and 19 (3%) years. Forty percent of the learners were in Grade 10, 34% in Grade 9, 19% in Grade 11 and 8% in Grade 8. Only 4% of the sample disclosed that they have a disability. With regard to sexual orientation, 88% of the sample group identified as heterosexual, 7% as asexual, 3% as bisexual, 1% as lesbian and 0% as gay.

1.8.3.1 *Methods of data collection*

The data for this study were initially collected by means of an electronic web-based survey (see Addendum A). The survey included three questionnaires, namely the Mental

Health Continuum Short Form (MHC-SF – Keyes, 2002), the Patient Health Questionnaire (PHQ – Kroenke, Spitzer & Williams, 2001) and an adapted version of the Daphne Cyberbullying Questionnaire (DCBQ, Smit, 2014). The MHC-SF and PHQ are about the participant's level of mental health and the DCBQ deals with their experience with CB. The questionnaires were perused beforehand by Mrs Wilma Breytenbach of the NWU Statistical Consultation Services, who found them to be appropriate for use in this study (see 4.3.2 for normal application and 4.4 for validity and reliability). Pilot testing was conducted prior to finalisation of the survey.

Google Forms was used for the online survey and it took participants approximately 20 minutes to complete it. Unfortunately, the researcher did not obtain enough responses on the first data collection trial, therefore an additional hard copy survey option (see Addendum B) was approved by Health Research Ethics Committee (HREC) of the NWU and provided to prospective participants (see 4.3.1.3). A second trial of data collection was consequently conducted. Participants thus had the option to either complete the online survey or the hard copy survey.

1.8.3.2 Data analysis

The Statistical Consultation Services of the North-West University assisted with data capturing and analysis. They used Statistical Analysis System (SAS) software. Descriptive statistics was mainly used to analyse the derived data. Loeb, Dynarski, McFarland, Morris, Reardon, and Reber (2017) state that descriptive analysis is used in quantitative studies to simplify the collected data. The research phenomenon is explained by identifying patterns in the data to answer questions such as who, what, when and to what extent. Differences between group means and linear relationships were interpreted according to Cohen's effect sizes (see 4.3.3). The data analysis and interpretation are discussed in Chapter 5 (5.2).

1.9 ETHICAL ASPECTS

1.9.1 Ethical procedures

Prior to commencement of the study, approval of the research design was obtained from the Scientific Committee of COMBER (Community Based Educational Research) in the Faculty of Education of the North-West University (NWU) (see Addendum C), and ethics approval was obtained from the HREC (Health Research Ethics Committee) because children were involved (Ethics approval number: **NWU-00009-17-S1**, see Addendum D). The risk level for participants in this study was estimated as greater than minimal risk with no

prospect of direct benefit to the child, but a high probability of providing generalisable knowledge. The researcher applied for ministerial consent since it was a prerequisite for this risk level, and ministerial consent was granted (see Addendum E). Permission to conduct the study in the Matlosana municipal area was obtained from various gate keepers, namely the Department of Education in the North West province (see Addendum F). Thereafter permission was obtained from the principals (see Addendum G) and parents (see Addendum H) of the selected schools via a mediator. The prospective participants gave adolescent assent (see Addendum I) to partake in this study.

1.9.2 Ethical considerations

Chapter 4 offers an in-depth discussion of the ethical aspects and the precautionary measures that were taken to minimise the risks in this study. For the purpose of this overview, the ethics guidelines that were followed are listed below (Health Professions Act 56 of 1974; Bless, Higson-Smith & Sithole, 2013):

- Avoidance of harm (see 4.4.1 of Chapter 4)
- Beneficence and non-maleficence (see 4.4.2 of Chapter 4)
- Voluntary participation and discontinuance (see 4.4.3 of Chapter 4)
- Ministerial consent, informed consent and adolescent assent (see 4.4.4 of Chapter 4)
- Privacy, anonymity and confidentiality (see 4.4.5 of Chapter 4)
- Freedom from coercion and no remuneration (see 4.4.6 of Chapter 4)
- Management, storage and destruction of data (see 4.4.7 of Chapter 4)

1.10 CONTRIBUTION OF STUDY

1.10.1 Contribution of the body of scholarship

This study contributed to the existing knowledge of the prevalence, nature and effects of CB on the MWB of adolescents (victims and bullies). This research attempted to extend the knowledge of relationships between CB and MWB and CB and depression. The researcher plans to write two to four academic articles from this study and present the findings at a suitable national conference.

1.10.2 Contribution to the community (schools, parents, adolescents and students)

There was no direct benefit for participants as this research was non-therapeutic. The indirect benefits of the research were as follows:

- Feedback on the results and recommendations of the study will be presented to the schools in 2020 in the form of a psycho-educational and awareness campaign. The campaign will support the schools by raising awareness of traditional bullying and CB, by revealing to them the implications of CB for schools, and by guiding schools to do something to stop CB, making the school environment a safer place for all. The study therefore adheres to the principles of health promotion in schools.
- Mental health promotion in schools will take place in 2020 since the researcher will hand out flyers on depression as compiled by the South African Depression and Anxiety Group (SADAG) (see Addendum J for the flyer and permission from SADAG president to distribute the flyer) at the participating schools.
- Learners who felt the need for help with either their general well-being or with being bullied/cyberbullied could request help at the end of the survey (see Addendum A). The supervisor referred them to the registered counsellors in training at the Educational Psychology Department, NWU, or to nearby public hospital clinics where intern or community service psychologists work. These services were free of charge.
- Student registered counsellors benefited from the opportunity to assist learners since it is part of their work-integrated learning. They assisted children in bettering their social well-being.

1.11 SUMMARY

Chapter 1 offered a brief overview of the study by elaborating on the research rationale and problem statement, the gaps in the literature and the context of the study. This was followed by the research questions, aim and objectives that guided the study. The theoretical framework was briefly presented as the overarching lens of the study, and the research paradigm, design and methodology were discussed. Lastly, the ethical considerations and the contribution of the study received attention. Chapter 2 examines the concepts *cyberbullying* and *adolescents*.

CHAPTER 2

CYBERBULLYING AND ADOLESCENTS

2.1 INTRODUCTION

This chapter starts by clarifying the main concepts related to CB, namely school violence, aggression and traditional bullying. Thereafter the nature of CB is discussed as it is described by the current body of literature and the demographic factors related to CB are explored. Also, the legal aspects related to CB are highlighted. Following this, the concept of adolescence is clarified, where after a multidimensional integrative (Bronfenbrenner's environmental systems) and developmental perspective relevant to adolescence is discussed to explain why adolescence is a predisposing factor for CB engagement and why some adolescents are more at risk than others.

2.2 CYBERBULLYING

2.2.1 Concept clarification of cyberbullying

Prior to defining CB, it is important to note that bullying forms part of a bigger picture, namely school violence and aggression in schools. Both traditional bullying and CB are forms of interpersonal violence that can cause short-/long-term physical, emotional, and social problems for the victim *and* the bully (Cohen-Almagor, 2018). Scholars hold opposing views on whether CB should be seen as a unique form of bullying or just as an extension of traditional bullying (Betts, 2016) as they appear to be interrelated. Figure 2.1 illustrates the researcher's understanding of the relationship between school violence, aggression, violence, traditional bullying and CB as it applies to this study.

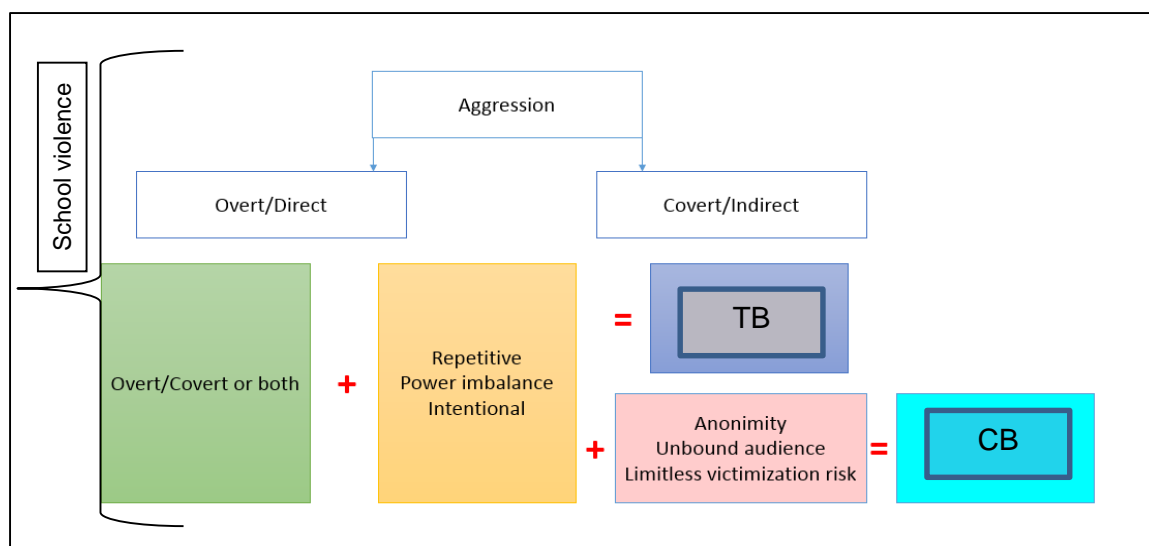


Figure 2.1: The relationship between school violence, aggression, traditional bullying and CB.

The above figure indicates that aggressive behaviour forms part of school violence and that it can be either overt or covert. Overt or covert behaviour, or even both, are displayed during traditional bullying and CB. Factors such as repetitiveness, power imbalance and intentionality occur in both traditional bullying and CB. However, what makes CB unique are the factors of anonymity, unbound audiences and the limitless victimisation risk. The following concepts are therefore clarified: school violence, aggression, traditional bullying and CB, victim and bully.

2.2.1.1 School violence

According to the latest UNESCO report on violence in schools, school violence occurs in all countries and approximately 246 million children and adolescents encounter some form of school violence annually (UNESCO, 2017). Power (2017) states that school violence is an evident problem in South Africa. It includes physical, psychological and sexual violence and bullying (UNESCO, 2017). Power (2017) classifies common school violence into the following types: abuse, assault, bullying, corporal punishment, gangs, gender-based violence, harassment, injury initiation, rape, sexual harassment and lastly sexual violation. The victims of these school violent acts are mostly children, but children could also be the bullies. Available data from Europe, North America and Australasia propose that the most usual form of school violence is bullying (UNESCO, 2017). As this study focuses on CB, the emphasis is on bullying (CB specifically) as a school violence type, and the learner could be the victim, the bully or both. It is important to note that school violence does not only occur

within the parameters of schools, it occurs when learners travel to and from school or when they are waiting outside their school (Power, 2017). CB is even more complex, as it haunts victims after school and it is not restricted to school grounds or classrooms (Batterbee, 2014).

2.2.1.2 Aggression

According to Bauman (2014), CB could be seen as a form of aggression. Aggression is when a person intentionally behaves in such a manner that it causes harm to another person (Feldman, 2014). Bauman (2014) refers to two distinct types of aggressive behaviour, overt and covert (also known as relational or social) aggression. Overt behaviour could include direct actions such as hitting and pushing and name-calling, and covert or relational behaviour could include non-physical, indirect actions such as excluding someone from friendships, saying mean and hurtful things, or damaging someone's social status (Bauman, 2014; Feldman, 2014).

2.2.1.3 Traditional bullying

The term *bullying* is generally used to describe behaviour as it occurs among children and adolescents, while the term harassment is more often used to describe similar behaviour among adults (Antoniadou & Kokkinos, 2015). Olweus (1993) defines *bullying* as follows: “a person is bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons, and he or she has difficulty defending himself or herself” (p. 9). The bully acts in a degrading, intimidating or demeaning manner in an attempt to gain social or personal power and disempower their victim in the process (De Wet, 2016). traditional bullying is used as a synonym for bullying in this study, as it refers to bullying as we know it without including CB.

2.2.1.4 Cyberbullying (CB)

Not all researchers agree on the definition of CB. According to Chadwick (2014), CB should not be considered separately from traditional bullying, but rather as a new form of bullying in our technologically advanced era – especially because the features of power, repetition and intent (see Figure 2.1) manifest in both CB and traditional bullying (Pieschl, Kulmann & Porsch, 2015). Riebel, Jager and Fischer (2009), however, are of opinion that the saying “old wine in new bottles” is relevant when one defines CB. These authors proclaim that 80% of cyberbullies are also involved in offline bullying, therefore the term traditional bullying is more applicable. Smith and Steffgen (2013) concurrently postulate that CB should fall under the broad umbrella term of *bullying* since intentionality and power imbalance apply

to both. Contrary to this, and more in line with the thinking in this study, it is argued that although traditional bullying and CB share common features, factors such as anonymity, the nature of audiences and the limitless victimisation risk (see Figure 2.1) could be distinguishing factors between CB and traditional bullying (Cassim, 2013; Smith & Steffgen, 2013). Therefore, in this study, we define CB as a separate concept.

CB, according to Bauman (2014), could include both overt and covert aggression behaviour types (see Figure 2.1) as it can be seen as “a vicious deliberate act, where a group or an individual uses technology repetitively over a long time to victimise a person who is unable to protect him or herself” (Smith, 2015, p. 176). According to Hinduja and Patchin (2019), CB can be defined as: “wilful and repeated harm inflicted through computers, cell phones and electronic devices” (p. 2). According to UNESCO (2017), CB is when one person harasses, threatens or targets another person by posting or sending text messages, pictures or videos online (e.g. social networks, blogs and chat rooms).

2.2.1.5 Victim

A victim is defined as “a person who has suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of his or her fundamental rights through acts or omissions that are in violation of our criminal law” (Department of Justice and Constitutional Development, 2007, p.3).

2.2.1.6 Bully

A bully can be defined as “a person who hurts or frightens other, weaker people” (Pharos English Dictionary for South Africa, 2011).

2.2.2 The nature of cyberbullying and related aspects

This section discusses the following: common features of both traditional bullying and CB, unique features of CB, trends to combine both traditional bullying and CB, types of CB, and CB role players.

2.2.2.1 Common features of both traditional and cyberbullying

Even though this study specifically focuses on CB, the conceptual clarification indicates that CB shares certain common features with traditional bullying. These commonalities are investigated first and thereafter CB is discussed as a unique form of bullying.

2.2.2.1.1 *Power imbalance*

A power imbalance occurs when a person with more power targets and assaults a person with less power. This power imbalance creates feelings of helplessness for the victims, who struggle to defend themselves (Smith & Steffgen, 2013). Pieschl, Kulmann and Porsch (2015) explain that power imbalance involves the statuses of the persons engaged in the bullying and includes characteristics such as bodily strength, age, advanced social or verbal proficiency, intelligence or the social position (class, race, gender, sexuality) of the bully in comparison to that of the victim.

Although power imbalance is a characteristic of both traditional bullying and CB, in CB the bullies' power does not lie in his/her strength but in his/her words. "Brutality is more about the crudeness of the mind than about the power of the hands" (Cohen-Almagor, 2018).

Olweus (2013) states that the manner in which the targeted person perceives the attack should also be taken into consideration when one evaluates the power imbalance, in other words whether the victims perceive the attack as hurtful or not, and whether they feel they can defend themselves or not. If they feel hurt by the attack and that they cannot defend themselves, a power imbalance is present. Factors that contribute to the power imbalance with regard to CB in particular are the anonymity aspect (Betts, 2016; Smith & Steffgen, 2013) and the infinite audiences that could be reached (Betts, 2016; Larranga, Yubero, & Ovejero, 2016). Both these factors are discussed in depth in the section on the features of CB (2.3.2).

2.2.2.1.2 *Repetition*

According to Batterbee (2014), repetition refers to the ongoing nature of the bullying. There should be a distinct pattern for it to be classified as bullying, not just a one-time incident. However, Betts (2016) and Smith and Steffgen (2013) argue that repetition with regard to CB can take many forms, since one incident can be viewed by many viewers on many different occasions, or one incident can be spread by another person who was not the original offender. The reproducibility of a cyberbully act is thus an emerging concern and enhances repetition as a trait of bullying (Navarro & Serna, 2016).

2.2.2.1.3 *Intentionality*

Smith and Steffgen (2013) assert that intentionality is included in most definitions of bullying and CB and it is the key characteristic of such hostile acts. When a bully acts

deliberately, thus not unintended, the behaviour is wilful/intentional (Batterbee, 2014). Olweus (2013) states that intentionality implies that the bully is completely aware of the fact that his harmful actions may be perceived or experienced as unpleasant, stressful or threatening by their victim.

2.2.2.2 *Unique features of cyberbullying*

2.2.2.2.1 *Anonymity*

Chadwick (2014) and Hinduja and Patchin (2019) argue that young people can mask or withhold their identity online by making use of anonymous e-mail addresses and pseudonym screen names. This is known as *perceived anonymity*. Some bullies have multiple e-mail addresses, make use of various mobile phones or block their identity from displaying. The anonymity factor provides the bully with additional power, and this leaves the victim feeling even more powerless (Cassidy, Jackson, & Faucher, 2016). Navarro and Serna (2016) discovered in their study that cyberbullies believe that it is very difficult to catch them out – they have a sense of anonymity and untouchability – and therefore they find it easier to be more aggressive. This is also known as the *online disinhibition effect*. Online disinhibition easily occurs because the cyberbully is not confronting their victims face-to-face, so victims are depersonalised (Batterbee, 2014), and the cyberbullies tend to be more aggressive and impulsive than traditional bullies. They do not realise the cruelty of their behaviour because they think that since they do not personally confront their victim, there will be no consequences for their behaviour (Lapidot-Lefler & Dolev-Cohen, 2014). They do not see their victim's emotional reaction and therefore they are more callous (Antoniadou & Kokkinos, 2015; Navarra & Serna, 2016), less empathetic (Lapidot-Lefler & Dolev-Cohen, 2014) and less affected. Hinduja and Patchin (2019) state that some adolescents might not even realise the severe harm they are causing to their victim, because they do not see their victim's response.

2.2.2.2.2 *Unbound audience of CB*

Electronic devices present cyberbullies with opportunities on a much larger scale than traditional bullying since they can use text messages, video and picture messaging and e-mails to target their victims by sending threatening and/or hostile messages to them (Bhat, 2008; Chadwick, 2014; Strasburger, Wilson, & Jordan, 2014). According to Pieschl, Kulmann and Porsch, (2015), acts of CB can be either *private*, for example via e-mail or a text message; *semi-public*, for example posting on Facebook; or *public*, for example posting

on websites or open-access social media. Langos (2014) distinguishes between direct bullying (sending hurtful messages to the person privately) and indirect bullying (sending hurtful messages indirectly to the victim by using a public medium to reach a broader audience). Hinduja and Patchin (2019) state that the pool of potential victims, aggressors, and witnesses/bystanders is unbounded. According to Larranga et al. (2016), victims find public bullying far more distressing than the impact of private bullying.

The bully can forward (share) communications or copies or pictures of communications to a large audience in a very short time to further humiliate the victim (Bhat, 2008). Cyberbullies might make use of blogs, online gaming (*e.g. Roblox, League of Legends, Overwatch, PlayerUnknown Battlegrounds, Fortnite*), chat rooms (*e.g. Snapchat*) and forums, as well as semi-public and public social networking sites (*Instagram, TikTok/Musical.ly, Facebook and Twitter*) to torment or embarrass others (Strasburger et al., 2014; Hinduja & Patchin, 2019). Chrisholm and Day (2013) state that a cyberbully can use social networking sites to for instance create a fake *Facebook* profile, to exclude or delete the victim from a friendship list, or to post harsh or threatening messages on someone's *Facebook* wall or about someone on their own wall. File sharing and streaming websites (*e.g. Instagram, YouTube Twitch, and Live.Me*) allow cyberbullies to upload pictures and videos for public viewing, for instance, videos of learners fighting, having sex or undressing (Batterbee, 2014; Hinduja & Patchin, 2019). Cyberbullies could also make use of downloadable apps to target their victims (Chrisholm & Day, 2013). Victims explain that when they have no control over their harassment and when they are uncertain of which audiences would see the ill treatment, it makes them feel more helpless (Larranga et al., 2016).

2.2.2.2.3 *The limitless victimisation risk*

In addition to all these available means to partake in CB, the online environment has expanded. Electronic devices can be used almost anywhere, at home, work, school, libraries and at public places such as restaurants, and shopping centres (Chadwick, 2014). Hinduja and Patchin (2009) are of opinion that CB has a *limitless victimisation risk* – a person can be contacted almost at all times and everywhere. traditional bullying ends when the school day ends, but CB infiltrates the victim's personal space since electronic devices can be used at any time to victimise them without having to physically come near them. A child's home is no longer a place where victims of CB can escape from their bullies. A participant in a study

conducted in the United Kingdom said the following: “You used to be able to go into school, get your head down, and have different friends outside of school... You could separate it... Now you can’t” (Anti-bullying Alliance, n.d.).

2.2.2.3 Trend to combine cyberbullying and traditional bullying

It is distressing to note that some adolescents have to do deal with a combination of traditional bullying and CB. Beran, Mishna, McInroy and Shariff (2015) state that CB is an extension of traditional bullying, since the actions acted out in physical space could be continued in cyberspace. Chadwick (2014) is of the opinion that there is an evolving trend to use both CB and traditional bullying to maximise the impact on the victim. The following actions are examples of this trend: insulting a person face-to-face and then online as well, for instance via instant messaging; pranking a person to embarrass them, making a recording of this and posting it online, and excluding a person from a social event and then mentioning the exclusion on social networking sites.

2.2.2.4 Types of cyberbullying

Similar to traditional bullying, CB too takes different forms. The ever-growing number of applications available for internet-connected devices present infinite possibilities for all sorts of harmful online interactions (Bhat, 2008). It is therefore not possible to list and discuss all types of CB, since the list expands as the industry grows. The list in Table 2.1 is therefore based on various existing types of CB (Batterbee, 2014; Chadwick, 2014; Chrisholm, 2014; Cowie, 2011; Gordon, 2018; Hinduja & Patchin, 2009 & Smith & Steffgen, 2013).

Table 2.1:

Types of Cyberbullying

Cyberbullying type	Description
Catfishing	Tricking someone into a romantic relationship or sharing intimate messages by faking your identity online
Cyber stalking	Repeatedly sending offensive, intimidating and threatening messages or requests to another person
Defamation/Denigration	When the bully attempts to harm the victim’s reputation or friendships by spreading malicious

Cyberbullying type	Description
	gossip or compromising content about the person
Exclusion	Withholding or blocking a person from taking part in online games or chats
Trolling	The cyberbully sends hostile, angry or malicious messages to inflame the emotions and reactions of others participating in a chat or game. The messages may be irrelevant to the discussion at the time
Flaming	This is similar to trolling, except the messages are directed to a specific person
Flooding	The bully sends several lines of text repetitively so that the victim's screen is literally flooded with text
Happy slapping	A physical attack on a person is recorded and then spread via social media
Identity theft	When a cyberbully gets hold of the victim's username and password and pretends to be the victim on their online communications platforms
Masquerading	When bullies pretend to be someone else by creating fake e-mail addresses or making use of a pseudonym on social and messaging platforms
Outing and trickery	Disclosing personal information about a person who shared it in confidentiality with the bully
Photoshopping	Where modifications are made to a photo with applicable software programmes
Physical threats	The bully threatens the victim online by claiming that he or she will physically harm the person
Sexting	The sending, receiving or forwarding of messages, photographs, videos or images of explicit sexual nature via mobile phones or other electronic devices

2.2.2.5 Cyberbullying role players

Adolescents who engage in CB are diverse and have a range of distinctive characteristics. They could be from various gender groups and from different age groups (Cohen-Almagor, 2018). Lindfors, Kaltiala and Rimpelä (2012) identified four different CB role players, which are discussed next: the cyberbully, the cyber victim, a combination of the two, namely a cyberbully–cybervictim (interchangeably fulfilling the role of bully and victim), and cyber bystanders.

2.2.2.5.1 Cyberbully and cyberbully–victim profiles

Various researchers have worked towards understanding the make-up of cyberbullies and cyberbully victims. Drawing on the work of Antoniadou and Kokkinos (2015); Baas, de Jong and Drossaert (2013); Baldry, Farrington and Sorrentino (2015); Bhat (2008); Cassidy (2009); Hasebrink et al. (2011); Smit (2015); van Royen, Poels, Vandebosch and Adam (2017); and Wegge, Vandebosch, Eggermont and Pabian (2016), the profiles of cyberbullies and cyber victims are illustrated in Table 2.2. It was interesting to notice that the same features often appear in both cyberbullies and victims. In this table, the features are divided into internal characteristics and external factors that contribute to the person being a bully or a victim.

Table 2.2:

Cyberbullying and Cybervictim Profiles

	Cyberbullies	Cyber victims
Internal characteristics	<p><i>Electronics use:</i></p> <p>Extensive time is devoted to information and communications technology and they have sophisticated internet skills.</p> <p><i>Psychological problems:</i></p> <p>Cyberbullies are often aggressive and show delinquent behaviour, some engage in substance use.</p> <p>They may struggle with low self-esteem and they bully others to</p>	<p><i>Electronics use:</i></p> <p>Extensive time is devoted to information and communications technology, they are thus an easy target.</p> <p><i>Psychological problems:</i></p> <p>They often have a low self-esteem, depression, social anxiety and anger.</p>

	Cyberbullies	Cyber victims
	improve their self-esteem or to explore new identities.	
	<i>Popularity and social status:</i> These adolescents want to obtain popularity and social status or retain their status.	<i>Popularity and social status:</i> They struggle to form their identity and find it difficult to fit in with a group.
External Factors	<i>Family environment:</i> Family conditions such as countless caregiver-child conflicts, lower parental support of teenagers, lack of communication with caregivers, poor emotional bonding and very restricted supervision, lack of protection from bullying exposure.	<i>Family environment:</i> They often do not have a strong bond with their parents at home, their parents or caregivers do not have information with regard to their online behaviour and they do not monitor their children's online activities.
	<i>Peers:</i> They often socialise with delinquent peers and the expectations of their peers intensify their CB activities.	<i>Peers:</i> These children might become socially excluded (ostracised) and belong to a vulnerable group.
	<i>School environment:</i> Learners often attend schools of which the policies are not well-defined, and they do not feel attached to their schools.	<i>School environment:</i> The schools that these victims attend are not supportive and they feel disconnected from their school.

2.2.2.5.2 *Different types of cyberbullies*

The STOP Cyberbullying programme (2017) differentiates between four distinct types of cyberbullies. Tranell (2014) provides an example of each type:

- *The power-hungry harasser / The revenge-seeker*

This type of bully seeks to gain power or to take revenge on those they perceive as more powerful. They are usually bullied physically and want to get back at their bully. They then use their advanced technology skills to torment their bully in cyberspace.

“You know what it's like to be bullied. In fact, you rarely make it through homeroom without someone calling you “loser.” So, when that jerk Jake and his friends pour milk all over your sandwich at lunch, it's the last straw. You go home that night and create a bogus Instagram account, anonymously uploading fake, humiliating pictures of Jake (thanks, Photoshop).”

- *The mean mob / Mean girls / The innocent bystanders*

This type of “mob” CB is usually performed by a group of girls. They are mostly bored when they decide to target someone, seeking entertainment.

“It's Friday night, and you and your friends are having a sleepover at Ashley's. You're all bored, so you gather around a laptop, laughing hysterically as Ashley torments her crush's new girlfriend on Ask.fm.”

- *The “innocent” avenger / Vengeful angel / The reputation protector*

This type of cyberbully does not consider themselves as bullies, since they consider themselves as protectors. They want to stand up for a friend who is cyberbullied.

“Sarah posts a nasty status update about your GF, Jane, on Facebook that says, ‘Jane got the lead in the play? Barf.’ You're furious. Without thinking twice, you comment-bomb the status, bashing Sarah's acting skills and calling her stupid. You've righted a wrong!”

- *The “Oops, did I do that?” bully / Inadvertent cyberbully / The careless class clown*

This type of bully has no intention to do harm, he/she acts without thinking about the consequences of their actions.

“You're on the bus on the way home from your soccer game, and everyone's joking about the giant zit on Kayla's forehead – even Kayla. Laughing, you take a photo of Kayla's face, then snapchat it to a few friends. (Caption: ‘This party is about to POP!’). One of the guys you know takes a Screenshot of the snap and posts it all over, leaving Kayla devastated.”

Since the inadvertent cyberbully does not intentionally harm the other person, this type does not fit the description of bullying – intend to harm, power imbalance and repetition. However, this example demonstrates that many adolescents are not even aware that they are

violating others' rights or that they can be held accountable for their actions, both civil and criminal (Fengu, 2018).

2.2.2.5.3 *Combination: cyberbully–cybervictim*

One would think that the negative experience of being bullied and being socially excluded will deter someone from becoming a bully. However, this is not always the case. O'Brien and Moules (2013) found in their study that some victims of CB tend to become bullies themselves. They would not likely bully offline, but they would bully others in cyberspace – thus retaliate. Furthermore, Betts (2016) states that victims of offline bullying often get revenge by means of CB, since CB does not rely on physical strength or social power/status. This type of bully is also known as the *power-hungry harasser*. These cyberbully-cybervictims portray higher levels of aggression than those who are only cyberbullies (Lapidot-Lefler & Dolev-Cohen, 2014).

2.2.2.5.4 *Cyber bystanders*

Besides the bully and the victim, bystanders and witnesses also play a vital role in CB. Two South African studies indicated that 46% of young people have witnessed CB (Popovac & Leoschut, 2012). There are various forms of cyber bystanders. There is the disengaged onlooker, they watch what happens, but do not take a stand because they feel that the bullying is none of their business (Olweus, in Colorosso, 2009). There are also bystanders. Bystanders are not passive, they could be supporters or followers of the bully, and consequently fuel the bullying or even incites and perpetuate the bullying. According to Heiman and Olenik-Shemesh (2015), the bystanders often seek the approval of the bully and they want to belong to a certain group. For that reason, they forward or share hurtful messages sent or posted by the bully to show their support for the bully, or to gain popularity and the acceptance of the in-group. They therefore do not attempt to help the victim. A bystander can, however, transform into a witness if the bystander stands up and defends the victim in cyberspace (Colorosso, 2009).

Besides the above-mentioned characteristics and external factors, there are certain demographic factors that put some adolescents more at risk to engage in CB than others (Cohen-Almagor, 2018). These factors are discussed next.

2.2.3 Demographic factors related to CB

The factors that contribute to CB are here narrowed down to gender, age, sexual orientation and disabilities. This engagement refers to the bully and the victim. As stated, these two roles are sometimes overlapping.

2.2.3.1 *Gender and age*

Involvement in CB activities increases as adolescents get older (Smit, 2015). Schultze-Krumbholz et al. (2015) suggest that older children have more access to the internet and mobile phones, they are more skilled in using these devices and have less parental supervision than younger children. Kowalski et al. (2014) assert that CB occurs predominantly between the ages of Grade 7 until Grade 10. Smit (2015) states that adolescents are extremely involved in CB around 15 years of age, which is much later than involvement in traditional bullying. In a South African study conducted by Tustin, Zulu and Basson (2014), it is evident that learners between the ages of 15 and 16 years, and in particular girls above the age of 16 years, are the most at risk to be exposed to CB. A plausible reason for this gender difference is that CB could be connected to indirect traditional bullying. Girls are usually more prone to participate in indirect bullying than boys (Smith et al., 2008). O'Brien and Moules (2013) reported that more girls than boys are victims of CB, have witnessed CB or know someone who has been bullied online. South African girls are to some extent more vulnerable to CB than boys (Burton & Mutongwizo, 2009). Smit (2015) is of the opinion that girls might be more involved in CB than traditional bullying, because it does not involve physical strength and it provides them the opportunity to get involved in reputation damaging activities. Baldry et al. (2015) found that girls are more likely to be victims of CB and that boys tend to be bullies. Schultze-Krumbholz et al. (2015) provide a likely reason for this. These scholars proclaim that boys simply do not report victimisation as much. However, O'Brien and Moules (2013) and Burton and Mutongwizo (2009) found that there is no particular gender that is more prone to act as the bully. Contradictory to these studies, Loney (2014) states that a national survey conducted in Canada by MediaSmarts found the mean girl stereotype to be inaccurate. The mean mob CB type mentioned before under types of bullies can therefore be questioned. The MediaSmarts study included 5 436 Canadian students (Grades 4 through 11) from 140 schools. They found that more boys (26%) than girls (20%) reported that they had previously cyberbullied someone. More girls than boys reported being victims of CB

and more girls (43%) reported it, compared to boys (33%). The study found that boys are prone to make fun of someone for their background, e.g. race, religion, ethnicity or sexual orientation and harass someone in an online game. Girls were more prone than boys to cyberbully someone by posting embarrassing photos or videos of them on social media. Noteworthy in this study is that both girls (20%) and boys (18%) have reported that they have spread a rumour about someone online. Therefore, future gender-focused studies could offer valuable data about the characteristics of cyberbullies (O'Brien & Moules, 2013).

2.2.3.2 Sexual orientation

Various studies, such as that of Cohen-Almagor (2018), Dredge, Gleeson and de la Piedad (2014), Rice et al. (2015), Robinson and Espelage (2012) and Schneider et al. (2012) indicated a higher prevalence of CB for adolescents who identified as being LGBTQ (lesbian, gay, bisexual, transgender, questioning/queer) than peers who identified as heterosexual. Rice et al. (2015) found in their study that almost one third of their respondents who reported as LGBTQ had experienced CB before, moreover, LGBTQ adolescents were 4.6 times more likely to be at risk for CB as opposed to their heterosexual peers. Navarro (2016) states that transgender and youths who are questioning their gender experience more CB than their lesbian, gay or bisexual peers. In addition, they experience sexual harassment in both traditional bullying and CB situations. Robinson and Espelage (2012) are of opinion that LGBTQ youths are more at risk of suicide ideation, suicide attempts and frequently being absent from school than their heterosexual classmates. Schneider et al. (2012) assert that there is sound evidence of a link between traditional bullying and sexual orientation, but the prevalence of CB among sexual minority groups has not been documented at large.

2.2.3.3 Disabilities

Children with disabilities and special needs are more at risk for being bullied by their peers (Cohen-Almagor, 2018). Didden et al. (2009) conducted a study with 114 adolescents between the ages of 12 and 19. These adolescents all have some form of intellectual and/or developmental disability. They reported the following: 7% were bullied via the internet and 5% were bullied via cell phone. Another study (Kowalski & Fedina, 2011) found that 21,4% of the participants reported that they had been victims and 5,8% reported that they had been bullies of CB in the past two months. This study focused on children and adolescents with attention deficit hyperactivity disorder (ADHD) and Asperger syndrome. Yet, in a study

(Anti-bullying Alliance, n.d.), adolescents with disabilities indicated that the internet had freeing and empowering aspects, since no-one knows who you are on the internet. They felt that they could hide the fact that they had a disability when they use the internet. It is evident that certain age groups, gender profiles, adolescents with disabilities and LGBTQ youths are at risk of experiencing victimisation or are prone to act as the bully, therefore these characteristics are explored in this study.

Laas and Boezaart (2014) and Smit (2015) indicate that human rights should be considered when one investigates CB. The next section thus focuses on the legal aspects related to CB.

2.2.4 Legal aspects related to cyberbullying

Brewer and Harlin (2008) state that bullying should be recognised for what it really is, “a violation of children’s rights” (p.386). UNESCO (2017) concurs that the rights of children and adolescents are violated due to violence and bullying in schools, including their right to education and to health. As mentioned, many adolescents are not even aware that they are violating others’ rights through CB. Therefore, it is important to become aware of human rights and legislation pertaining to CB.

Drawing on the work of Batterbee (2014); Cassim (2013); Hills (2017); Laas and Boezaart (2014); Power (2017) and Smit (2015) human rights and its relevance for CB are laid out in Table 2.3.

Table 2.3:

Human Rights Related to CB

Constitutional right in terms of the Constitution of the Republic of South Africa, 1996	Relevance to CB
<p><i>Section 9(3): Everyone is equal before the law and the state may not unfairly discriminate against anyone.</i></p> <p>The state may not unfairly discriminate directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth.</p>	<p>Laas and Boezaart (2014) explain that bullying could infringe the victim’s right to equality if the bully discriminates against the victim on one or more of the grounds mentioned in subsection 9(3).</p>

Constitutional right in terms of the Constitution of the Republic of South Africa, 1996	Relevance to CB
<i>Section 9(4) No person may unfairly discriminate directly or indirectly against anyone on one or more grounds in terms of subsection (3).</i>	If the cyberbully, depending on individual cases, discriminate by means of hate speech, he or she cannot rely on their own freedom of expression, since they are infringing on another person's right not to be discriminated against (Hills, 2017).
<i>Section 10: Everyone has inherent dignity and has the right to have their dignity respected and protected.</i>	Since CB can be degrading and malicious, it could infringe the victims' dignity. The onus is on the state to protect learners against CB (Hills, 2017). A victim's human dignity is violated when the bully showcases his/her power, intimidates and humiliates the victim or when the bully causes physical/emotional harm to the victim (Laas & Boezaart, 2014). Batterbee (2014) provides an example of dignity violation with regard to CB, namely when photos are taken of learners in change rooms or other situations. These photos usually intend harm to the victim. If the bully goes further and sends these photos to others on different platforms, it causes even more harm to the victim.
<i>Section 12(1)(c): Everyone has the right to freedom and security of the person, which includes the right to be free from all forms of violence, (d) not to be treated in a degrading manner.</i>	A person should be protected from violence, torture, cruel and inhumane treatment. Bullying clearly transgresses this right. Moreover, Section 12(1)(d) protects the physical integrity of a person as well as their psychological well-being (Laas & Boezaart, 2014).
<i>Section 14(d): Everyone has the right to privacy, which includes the right not to have the privacy of their communications infringed.</i>	Laas and Boezaart (2014) provide an example of how a person's right to privacy could be violated in a bullying occurrence, namely if the bully reads the victim's personal diary or reads private information on the victim's cell phone. The victim's right to privacy could be violated even further if the bully shares this personal information to others.
<i>Section 16: Everyone has the right to freedom of expression.</i>	Cassim (2013) states that this right does not give another person the right to cause harm, incite violence or advocate hatred. The right of one person to for example express his/her ideas on Facebook should be weighed against the violation of another person's dignity and privacy.

Constitutional right in terms of the Constitution of the Republic of South Africa, 1996	Relevance to CB
<i>Section 24(a): Everyone has the right to an environment that is not harmful to their health or well-being.</i>	When a school environment is characterised by bullying it is no longer regarded as a safe space. Due to the fact that CB is not restricted to the school grounds, a victim could feel that his/her personal environment is infringed on as well (Batterbee, 2014). The online environment itself can become harmful to their MWB.
<i>Section 28: The rights of the child</i> 28(1)(d) children have the right to be protected from maltreatment, neglect, abuse and degradation, 28(2) that in every matter concerning the child their best interest is of paramount importance	CB can be categorised as a form of abuse (Hills, 2017). Laas and Boezaart (2014) proclaim that bullying stands in the way of a child's right to be protected from harm, and to develop and learn. It thus goes against their best interest.
<i>Section 29: The right to education</i>	This right should not be hindered by others' hurtful behaviour (Batterbee, 2014). When CB has an effect on the quality of education learners receive, it should be regulated. Learners must be informed at school about the dangers of CB (Hills, 2017).

The Constitution of the Republic of South Africa, 1996 makes provision for certain institutions to strengthen constitutional democracy and to promote human rights. These institutions are recognised as Chapter 9 institutions (SAHRC, 2018). The South African Human Rights Commission (SAHRC) is one of these institutions; it can by law enforce all human rights. The SAHRC primarily promotes, protects and monitor human rights in our country. There are specific legislation for the protection of specific human rights of a person, e.g. the Promotion of Equality and Prevention of Unfair Discrimination Act of 2000 protects against discrimination, the Protection from Harassment Act 17 of 2011 protects the freedom and security of a person and the South African Schools Act 84 of 1996 protects the right to education. These and other available legislation in South Africa for cyberbully victims and bullies are discussed next.

2.2.4.1 *Legislation in South Africa*

According to Badenhorst (2011), Cassim (2013) and Smit (2015), South Africa does not have precise education specific legislation that could assist victims with CB. However, adolescents can be held accountable for their social media actions (Department of Justice and Constitutional Development, n.d.). In addition, Badenhorst (2011) and Cassim (2013) explain that victims of CB can rely on the remedies that civil and/or criminal law offers them. Victims of CB need to know to which courts and remedies they can turn if needed. Equally, cyberbullies have to be aware of the charges that can be laid against them. The legislation and the sanctions and remedies that each law provides to both victims and bullies are explicated below.

2.2.4.1.1 *The Constitution of the Republic of South Africa, 1996*

The Constitution is the highest law of South Africa (section 2). This means that all other laws should abide by the Constitution and any law or practice inconsistent with it is invalid. The Bill of Rights is enclosed in Chapter 2 of the Constitution. It contains the fundamental rights of all people in South Africa and imposes related duties on the state (section 7) as well as public and private persons (section 8). When it comes to the topic of this study, *all* persons (in other words also Grade 8 to 11 learners) have the duty to respect the rights of others (section 8).

In an attempt to foster a sense of responsibility to create a culture of human rights in education, the Department of Education published a “Bill of Responsibilities for the Youth of South Africa” in 2008 (Department of Education, 2008) This “Bill of responsibilities” refers to the responsibilities that the youth have towards their own as well as with respect to the rights of others. Pertaining to bullying, to ensure that the right to freedom and security of the person 12(1)(c) is fulfilled, youth have to take responsibility by not hurting, bullying, or intimidating others, or allowing others to do so, and by solving any conflict in a peaceful manner.

2.2.4.1.2 *Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000*

CB could infringe on the victim’s constitutional right to equality if the bullying behaviour is directed towards the victim on the grounds of their membership or perceived membership of any group identified by the listed grounds in section 9(3) of the Constitution. As such, the perpetrator’s behaviour may constitute unfair discrimination against the victim on one of the grounds (see Table 2.3) mentioned in subsection 9(3) of the Constitution. The

Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000 can provide remedies for victims of unfair discrimination, hate speech and harassment and persons whose right to equality has been infringed (section 2 (f)). Adolescents can thus approach the Equality Court if they have experienced CB that amounts to discrimination. According to the Western Cape Government (2019), if the victim lodges a complaint and the court finds in his/her favour, there are several remedies available to the victims, such as:

- the bully providing a genuine apology;
- the bully being instructed to do or not do something, or to restrain from unfair discriminatory practices;
- the bully being held liable for actual financial loss, loss of dignity, or pain and suffering (including emotional and psychological suffering);
- the bully being summoned to pay a fine to an appropriate organisation; and
- the bully having to provide a declaratory order.

2.2.4.1.3 *The Children's Act 38 of 2005*

Bullying is defined as a form of abuse according to the Children's Act (section 1). The purpose of the Children's Act is to give effect to the rights of children contained in the Constitution. In this Act, unless the context indicates otherwise -

“abuse”, in relation to a child, means any form of harm or ill treatment deliberately inflicted on a child, and includes -

- (a) assaulting a child or inflicting any other form of deliberate injury to a child;
- (b) sexually abusing a child or allowing a child to be sexually abused;
- (c) *bullying* by another child (own emphasis);
- (d) a labour practice that exploits a child; or
- (e) exposing or subjecting a child to behaviour that may harm the child psychologically or emotionally.

The above definition implies that when one child bullies another child, it is seen as a form of abuse and the same measures used against adults could thus be applied – the victim

can approach the Children's Court with the matter (Reyneke & Jacobs, 2018). The court will take into account that the bully is a minor and he/she will be treated accordingly.

2.2.4.1.4 *The Child Justice Act 75 of 2008*

Even though bullies can be summoned to the Children Court, the Child Justice Act offers a separate criminal justice system for children. When children are guilty of a criminal offence, such as child abuse in the form of CB, they will be dealt with according to the restorative practices of the Child Justice Act (Badenhorst, 2011). This entails that children are held accountable for the crime they committed without criminalising them unnecessarily. The main aim with this system is that the child takes responsibility for his or her actions, it limits potential re-offending and the bully reconcile with the victim, if possible (Reyneke & Jacobs, 2018).

2.2.4.1.5 *The Protection from Harassment Act 17 of 2011*

The preamble of the Protection from Harassment Act 17 of 2011 stipulates that the act (a) afford victims of harassment with an effective remedy against such behaviour; and (b) introduce measures which seek to enable the relevant organs of state to give full effect to the provisions of this Act. Smit (2015) asserts that the Protection from Harassment Act sees bullying as a form of harassment and as CB is a form of bullying, cybervictims could use this Act as a form of protection. They can apply to a court for an interim protection order (Hills, 2017). Smit (2015) furthermore explains that this Act only provides for protection, not for punishment of the offender.

Sadler and Harrison (2017) explain the legal consequences of online bullying by stating the following: "all the laws that apply in real life, apply online too and secondly online life is still real life" (p .58). Cyberbullies can thus be charged with either *crimen injuria* or criminal defamation (Hills, 2017). *Crimen injuria* consist of "unlawfully and intentionally impairing the dignity or privacy of another person" and defamation involves of the "unlawful and intentional publication of matter that impairs another person's reputation" (SAPS, n.d.). Thus, if a cyberbully only sends hostile e.g. messages/e-mails to the victim and does not make it public, he/she can only be charged with *crimen injuria*, but when they defame the reputation of the victim by making the bullying public, e.g. on a social network platforms, they can be charged with criminal defamation (Hills, 2017).

2.2.4.1.6 *The South African Schools Act 84 of 1996*

It is clear that bullying should not be tolerated by schools and that schools should protect learners in this regard (Batterbee, 2014). A school as an organ of the state has to respect, protect, promote and fulfil learner's rights (Constitution, section 7(2)). The Schools Act stipulates how schools should be organised, governed and funded (McConnachie, Skelton & McConnachie, 2017). Section 8(1) of the Schools Act states that subject to any applicable provincial law, a governing body of a public school must adopt a code of conduct for the learners after consultation with the learners, parents and educators of the school. The difficulty for schools with regard to CB is that CB involves their learners, but it can occur outside school parameters – SGBs and principals should take the unique features of CB into account (Reyneke & Jacobs, 2018). However, since bullying can have a negative impact on learners and the learning environment, the code of conduct should have a proper section on dealing with bullying. The seriousness of the bullying will determine if the learners should have a disciplinary hearing, and as a result may be suspended or expelled (McConnachie, Skelton & McConnachie, 2017).

Lastly, educators have an *in loco parentis* obligation (“in the place of the parent”) towards learners (Power, 2017). They are thus obligated to protect learners from any physical or psychological harm, to safeguard their rights and to provide them with a safe environment in which their MWB can be optimised (Laas & Boezaart, 2014). The next section explores why adolescents are prone to engage in CB activities from a multidimensional integrative and developmental perspective.

2.3 ADOLESCENCE: A MULTIDIMENSIONAL INTEGRATIVE AND DEVELOPMENTAL PERSPECTIVE ON CYBERBULLYING

2.3.1 Concept clarification of adolescence

According to Feldman (2014), adolescence can be seen as a developmental period that includes both continuity of childhood and discontinuity from childhood. Steinberg (2008) states that the word adolescence originated from the Latin word *adolescere*, meaning “to grow into adulthood” (p.6). Adolescence can be defined as the developmental period from puberty to adulthood. Adolescents go through dramatic biological changes, new experiences and they have to manage new developmental tasks (Feldman, 2014). The onset of this phase is typically between 11 and 13 years of age and it terminates legally when the adolescent

reaches the age of 18 (Colman, 2009). In this study, the focus group of adolescents was Grade 8 to 11 learners. These learners are between the ages of 12 and 17 years old.

2.3.2 Multidimensional integrative and developmental perspective on CB

According to Barlow and Durand (2015), an individual's behaviour, both normal and abnormal, stems from the ongoing interaction between psychological, biological and social influences. Adolescence is a developmental time of fast development and several biopsychosocial changes take place (Rogers, 2004). A multidimensional integrative approach is therefore needed to determine why adolescents are more prone to engaging in CB than younger children or adults. The biological dimension of this approach includes factors from the genetic and neuroscience fields; the psychological dimension includes factors related to behavioural and cognitive processes; the emotional dimension includes social and interpersonal influences, and lastly; the developmental dimension relates to all behaviour (Barlow & Durand, 2015).

Subrahmanyam and Smahel (2011) suggest that one should use a developmental approach to understand adolescents' digital behaviour. The significant changes during adolescence, the role of context and psychological tasks adolescents have to master are therefore reviewed. In using a developmental perspective to understand aggression/bullying, it is important to keep in mind the timeframe when youths explore their behavioural and social capacities along with the dynamics of power (Pepler, Jiang, Graig & Connolly, 2008).

This section reviews some of the key developmental models that are used to understand the unique developmental period of adolescence from a multidimensional integrative perspective. The physical, cognitive, personality and social development of adolescents is discussed, as well as the role of the digital media context within which adolescents develop. The physical development of adolescents are explored next.

2.3.2.1 *Physical development of adolescents*

For the purpose of this study, only the development of sexuality is discussed and not the physical changes adolescents go through.

2.3.2.1.1 *Sexual development*

Kar, Choudhury and Singh (2015) state that "during adolescence, an individual's thought, perception as well as response gets colored sexually" (p 70). Biological (genetic and neuro-endocrinal) factors, psychological (personality and temperament) factors and social

(parents' attitude towards sexuality, parenting styles, peer relationship and cultural influences) factors all play an imperative role in sexual development in adolescents (Kar, Choudhury & Singh, 2015).

McNeely and Blanchard (2009) define healthy sexual development as a developmental time of puberty (physical sexual maturation), forming of a sexual identity and age-suitable sexual behaviours. Adolescent sexual development can be divided into early, middle and late adolescent stages (Tulloch & Kaufman, 2013). During early adolescence, most adolescents go through physical changes and try to adjust to these changes. They are concerned with their body image and their privacy become more vital to them. They are more actively involved in group activities and their peer relationships are central to their being. In general, during middle adolescence, adolescents establish a sexual orientation and identity. During this phase they are concerned about whether they are attractive or not. They might "fall in love" for the first time and might experiment with intercourse. Late adolescence is the phase where the adolescent is typically more secure in the sense that they have accepted their body image and gender role. Their sexual orientation is also almost secured.

Typically, part of adolescence is to form a sexual orientation (Tulloch & Kaufman, 2013). Sexual orientation refers to the attraction one person has for another person, both emotionally and sexually. A person can either identify as heterosexual, lesbian, gay, bisexual, queer, transgender or questioning (for persons not yet sure of their sexual orientation) (McNeely & Blanchard, 2009). Since various studies have indicated a higher prevalence of CB among adolescents who identified as being LGBTQ than peers who identified as heterosexual (see 2.2.3.2), the sexual orientation of adolescents should be explored within the context of this study.

2.3.2.2 The cognitive development of adolescents

This section explains cognitive development from a neurodevelopmental perspective. The aspects self-consciousness and self-focusing during adolescence are also discussed.

Adolescence is a time of magnificent cognitive progression (Subrahmanyam & Smahel, 2011). This refers to Piaget's concept of formal operational thinking. Children enter this stage at about the age of 12, and this cognitive development reaches into adulthood. During this time adolescents' ability to think abstractly and to reason about hypothetical issues increases (Carr, 2016). They can thus make use of alternative ways to solve a problem (Louw & Louw, 2014). Even though their thoughts are more sophisticated, Batterbee (2014)

states that adolescents are more involved in high-risk activities such as violence, drug abuse, exposure to pornography and *CB*.

2.3.2.2.1 *A neurodevelopmental perspective*

Steinberg (2008) provides an explanation as to why adolescents are more inclined to take risks than children and adults. The author refers to “a tale of two brain systems” (p.82). Risk-taking increases as children move from childhood to adolescence because their social-emotional system develops. Adolescents are reward-seeking, especially among their peers. Risk-taking decreases as adolescents move into adulthood and their executive control system develops. The adolescents’ executive control system (*prefrontal cortex*) is still developing. The prefrontal cortex is the part of the brain that is responsible for impulse control, emotional regulation and evaluation of risks and consequences. Neurological development takes place from the back of the brain (stem) to the front, with the frontal cortex being the last to develop (Leany, 2013) (see Figure 2.2).

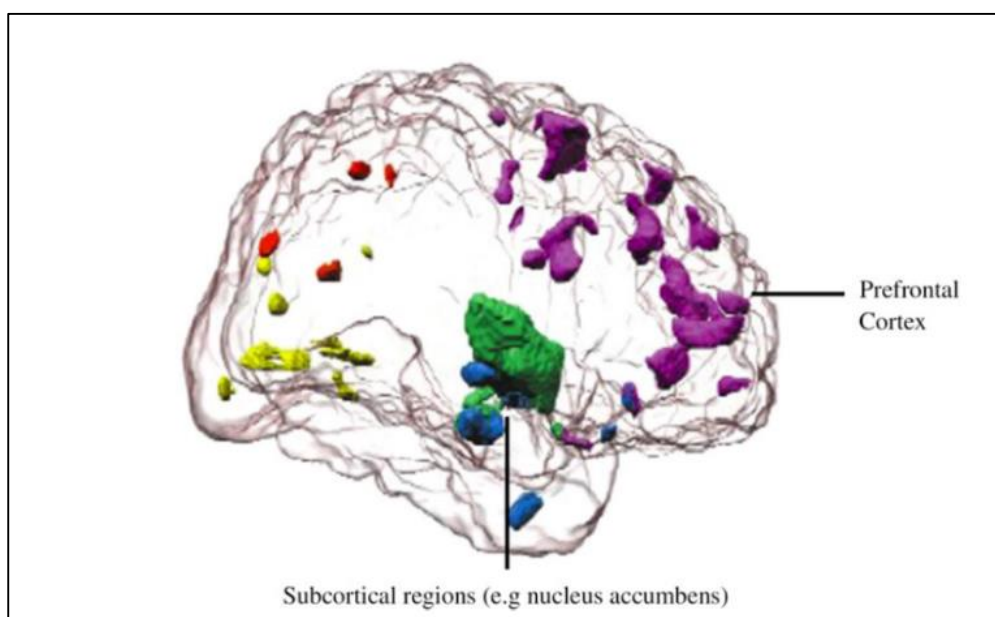


Figure 2.2: Illustration of the brain regions (Sowell et al., 1999 adapted by Casey, Jones & Hare, 2008)

The slow maturation of the prefrontal cortex is not the only reason why adolescents are prone to risky behaviour. Casey et al. (2008) take the protracted development of the prefrontal cortex as well as the faster development of the subcortical limbic regions in consideration. The adolescent brain undergoes a second growth spurt after infancy in the form of synaptic pruning and increases in myelination (Leany, 2013). Consequently, during

adolescence the maturity of the two systems, the more developed “emotional system”, i.e. the limbic system (subcortical regions) and the less mature “thinking system”, i.e. the prefrontal cortex, are out of balance. When the adolescent brain has to deal with emotional situations, the limbic system (emotional, non-thinking brain) overrules the control system (Casey et al., 2008). Bullying is motivated by emotions rather than reasoning, and the victims often lack the skills to rationalise the state of affairs and may act on suicidal thoughts (Cohen-Almagor, 2018).

2.3.2.2.2 *Self-consciousness and egocentrism*

Carr (2016) states that even though adolescents’ cognitive thinking develops remarkably, there are some limitations in the formal operational period that predispose them to being more self-conscious and self-absorbed or egocentric than in middle childhood. According to Piaget (1896–1980), adolescent egocentrism increases during adolescence because they struggle to differentiate the abstract perspective of themselves and the perspective of others (Louw & Louw, 2014). Moreover, they find it difficult to solve interpersonal problems because their capacity to reason logically is limited (Carr, 2016) and they are more emotional. Elkind (1967) expanded the concept of adolescent egocentrism and coined two concepts, namely the *imaginary audience* and the *personal fable*. According to Elkind (1967), adolescents are continually constructing or responding to an imaginary audience. It is an audience because the adolescent believes that he/she is the focus of attention; and it is imaginary because this is not usually the case in actual social situations. This imaginary audience contributes to the self-consciousness that some adolescents experience because they think others are just as critical of them as they are of themselves. The personal fable concept originates from the fact that certain adolescents believe they are important to many people (the imaginary audience), therefore they think that they are somehow special and unique (Elkind, 1967). Some adolescents have an inflated opinion of their own importance and this can contribute to risk-taking because they believe that the negative consequences of risk-taking behaviours (e.g. drunk driving and unprotected sex or bullying) will not happen to them (Louw & Louw, 2014, Cohen-Almagor, 2018).

2.3.2.3 *Personality development of adolescents*

2.3.2.3.1 *Identity development: A psychosocial developmental perspective*

Erikson (1800–1800) was one of the first theorists to recognise the importance of personal identity forming (Louw & Louw, 2014). Erikson’s life-span development theory,

namely the psychosocial development theory (Donald, Lazarus & Lolwana, 2014), places adolescence in a developmental period that forms part of Erikson's eight stages of psychosocial development. Each of these stages of psychosocial development involves a certain developmental challenge (see Table 2.4) that a person must resolve to move to the next stage. The experiences gained from a previous stage shape how the new developmental stage and its concurrent challenges is resolved. It is significant to note that people may have positive or negative experiences as they pass through these challenges, and individuals must attempt to resolve the tension between these experiences. When a person has more negative than positive experiences during any given phase, psychosocial developmental problems may occur.

Table 2.4:

The Eight Stages of Psychosocial Development (Louw, Louw & Kail 2014, p.22)

Psychosocial stage	Age	Challenge
Basic trust versus mistrust	Birth to one year	To develop a sense that the world is a safe and good place.
Autonomy versus shame and doubt	One to three years	To realise that one is an independent person who can make decisions.
Initiative versus guilt	Three to six years	To develop a willingness to try new things and to handle failure.
Industry versus inferiority	Six years to adolescence	To learn basic skills and to work with others.
Identity versus identity confusion	Adolescence	To develop a lasting, integrated sense of self.
Intimacy versus isolation	Young adulthood	To commit to another in a loving relationship.
Generativity versus stagnation	Middle adulthood	To contribute to younger people, through child rearing, voluntary community work or other productive work.
Integrity versus despair	Late adulthood	To view one's life as satisfactory and worth living.

Adolescents are typically in the *identity versus role diffusion stage* (12–18 years old) of Erik Erikson’s model. This stage is a period during which *adolescents* are challenged with the formation of their unique personal identity (Feldman, 2014). Personal identity “refers to the individual’s awareness of him- or herself as an independent, unique person with a specific place in society” (Erikson in Louw & Louw, 2014 342). This identity configuration includes many elements, such as gender, sexuality, morality, politics, religiosity and occupation (Subrahmanyam & Smahel, 2011). Adolescents attempt to determine what makes them unique and which roles they have to play in society. If adolescents fail to resolve this stage successfully, either because they are bullied or are bullying others, they might adopt improper social roles, struggle to form acceptable identities, or become confused about who they are, and even form a negative identity where being the bully is who they want to be (Feldman, 2014). A negative identity typically is when adolescents form an identity contradictory to cultural values and expectations (Louw & Louw, 2014).

2.3.2.3.2 *Emotional development*

According to Carr (2016), adolescents experience complex emotional cycles and they gradually make use of complex strategies to regulate these emotions independently. These strategies are mainly informed by their moral principles (see section on social development). If adolescents find it difficult to regulate emotions such as anger, fear and sadness, it could lead to conduct disorders, anxiety and depression (Carr, 2016). According to Louw and Louw (2014), adolescents experience fewer positive emotions and more negative emotions than younger children. Lightfoot, Cole and Cole (2013) concur that adolescents’ overall happiness decreases as they grow older. They can feel negative emotions such as self-consciousness, embarrassment, anxiety, awkwardness and loneliness. Their emotions can change very quickly, one moment they can feel joyful, but within an hour they can feel sad or angry (Louw & Louw, 2014). Even though their emotions are somewhat unstable from time to time, adolescents can show more insight into their own and others’ feelings than children. They can thus show empathy towards another person, but usually only if they are forced to place themselves in the other person’s shoes. This is due to their increased cognitive abilities such as thinking more abstractly, as discussed earlier (Louw & Louw, 2014).

2.3.2.4 The social development of adolescents

2.3.2.4.1 Parent–adolescent relationships

Adolescents seek autonomy, which typically means they seek independence; they want to make their own decisions and feel in control of their own lives (Louw & Louw, 2014). During this time, parents are sometimes stricter, mainly because they want to protect their children. Some adolescents rebel against this increased control. It is important that parents understand that this autonomy-seeking is a normal development task and necessary for adult life. Parents can assist adolescents to master decision making by gradually providing them with more control. The attachment bonds that parents and their adolescent have would assist them with this autonomy process. If adolescents feel secure they are able to handle the increasing social demands better than a peer who is experiencing insecurities (Louw & Louw, 2014). Moreover, if an adolescent feels that their autonomy is hindered they could often react in an anti-social manner due to amplified anger and aggression, but if their need for autonomy is adequate they will display pro-social attitudes and behaviour (Fousiani, Dimitropoulou, Michaelides & Van Petegem, 2016). The family environment in which adolescents develop plays a crucial role in how they deal with CB. If the quality of the family environment is undesirable, it leaves the adolescent more vulnerable to CB exposure and to be exposed for a longer duration, since they lack support from their parents to deal with the problem (Ortega-Barón et al., 2017). Parents and teachers therefore play a fundamental role in combating the CB problem. They can assist adolescents by educating them about the risks that exist online and how to avoid them. The means parents and teachers can use to assist adolescents are further explored in Chapter 6 (6.3.1.3 and 6.3.1.4).

2.3.2.4.2 Peer group relationships

Adolescents spend plenty of their time establishing peer relationships. These relationships become more intense and of greater importance to them as they grow older. During this time, adolescents do not only form friendships, but crowds and cliques form as well. These smaller groups (cliques) aid their emotional and security needs and help them to form a healthy sense of independence and belonging, apart from their family of origin (Louw & Louw, 2014). According to Rogers (2008), it is useful to conceptualise peer relationships from an attachment theory perspective. When adolescents experience secure and positive attachments with their parents, they have the ability to form good relationships with peers and they are resistant to peer pressure. In contrast, when they experience negative and insecure

attachments with their parents, they have an intense need to conform to peer group standards and they can even engage in negative behaviours to please their friends. Adolescents associate with peers that share the same image or reputation they do (Subrahmanyam & Smahel, 2011). Moreover, adolescents want to belong to a group. Their involvement with friends plays a role in their psychosocial development, because peer relationships satisfy their emotional needs (Louw & Louw, 2014). If adolescents experience poor peer attachment (knowledge that your peers will be there for you when you need them), they may become involved in conflict, victimisation and experience behavioural problems. They may even show less empathy and be aggressive towards their peers (Wright, Aoyama, Kamble, Li, Souidi, Lei & Shu, 2015).

2.3.2.4.3 *School relationships*

A perceived sense of school belonging is a term that could be seen as the extent to which learners feel accepted, respected and included by their peers, as well as the support they receive from others in their school environment. This sense can be either positive or negative (Phan & Ngu, 2019). The school environment is far more than just a space where learning takes place, it is a space where children (should) develop emotionally, behaviourally, and cognitively, where they should learn to become independent human beings and to form positive relationships with peers and teachers (Wang & Degol, 2016). Schools should provide learners with opportunities for and pathways to personal growth (Phan & Ngu, 2019). The climate of a school will thus shape the social development of learners to a great extent (Wang & Degol, 2016). Acosta, Chinman, Ebener, Malone, Phillips and Wilks (2018) found that in schools where students reported a positive climate (higher levels of school connectedness, peer attachment and social skills) they reported less bullying. Contradictory, if the school climate was negative, Ortega-Barón et al. (2017) revealed that victims of severe CB did not regard their teachers as authority figures to whom they could turn for help. They also felt that their classmates did not help them and these increased feelings of loneliness led to more negative perceptions of friendships with peers.

2.3.2.5 *Moral development*

According to Louw and Louw (2014), one of the most vital developmental tasks during adolescence is the development of a personal value system. Carr (2016) views Kohlberg's six stages of moral development (see Table 2.5) as one of the best known theories

of moral development (Rogers, 2008). According to his theory, people develop their moral reasoning at different rates and not everyone will master all six stages. Some people may remain in the same stage, depending on a person's experiences and cognitive maturity. Louw and Louw (2014) state that level one is generally mastered during childhood and most adolescents and adults attain level two, but only a small percentage of adults reach level three.

Table 2.5:

Kohlberg's Theory of Moral Development (Rogers, 2008)

Level 1: Pre-conventional reasoning	
Stage 1: Punishment and obedience orientation	People make decisions about what is good or bad to avoid punishment.
Stage 2: Naïve instrumental hedonism	People obey rules to get rewarded.
Level 2: Conventional reasoning	
Stage 3: Good boy/girl mentality	People behave in ways to please others.
Stage 4: Authority-maintaining morality	People strongly believe in law and order.
Level 3: Post-conventional reasoning	
Stage 5: Morality of contract, of individual rights, and of democratically accepted law	People view laws and social order as necessary, however laws have to be questioned in light of the common good.
Stage 6: Morality of individual principles and conscience	People's behaviour is based on internal principles of what is right and wrong.

The developmental task of forming intimate friendships and romantic relationships during adolescence brings significant decisions to the fore that can influence an adolescent's moral judgement (Hart & Carlo, 2005). Furthermore, adolescents' social context changes since they have more opportunities than before. They can for instance engage in community activities, but they are also more exposed to making decisions regarding e.g. smoking and drinking. All these contextual factors influence their moral development (Hart & Carlo, 2005, Louw & Louw, 2014). Adolescents who are still stuck in the good-boy-good-girl stage of moral development might be more prone to engage in bullying as long as they are not caught

out (not looking bad) or as long as they look “good” because bullying is accepted in their social circle. Subrahmanyam and Smahel (2011) concur that it is important to consider the effect of the social environment on adolescents’ development. The social environment includes their peers, families, schools, churches and other public places - it can either enhance or hinder their development (Louw & Louw, 2014). A fragment of the CB problem relies on the quality of these significant relationships (Ortega-Barón, Buelga, Cava & Torralba, 2017). Table 2.2 outlines how external factors (social environmental factors) put victims and offenders at risk for becoming involved in CB. In this section the effect of the parent–adolescent relationships, peer group relationships and school relationships on the adolescent’s development are discussed.

2.3.2.6 The role of the digital media context in which adolescents develop

Today’s children and adolescents have access to both traditional media and new digital technologies. The traditional media, also known as broadcast media, mainly include television, radio and periodicals. The interaction between the user and traditional media is passive, since the person only listens, watches or reads. Digital media users in contrast can be actively involved as consumers or creators of content (Chassiakos, Radesky, Christakis, Moreno & Cross, 2016). Allen et al. (2014) are of the opinion that a paradox exists regarding the use of digital media by adolescents: there are both advantages and disadvantages associated with digital media use.

- *Digital media context: Advantages*

The digital media context provides adolescents with a new, additional environment for psychosocial development. It provides them with more opportunities to enhance their peer relationships and there are more occasions for self-disclosure. They can also be included in groups that they would not necessary have been included in within a traditional context (Shapiro & Margolin, 2014). Social media might heighten a sense of belonging and psychological well-being and aid adolescents with the formation of their identity (Allen et al., 2014). Lee and Kim (2015) agree with this statement. They are of the opinion that sending positive messages can help people in demanding situations. Carrol and Kirkpatrick (2011) state that adolescents use social media for the following: to extend friendships they have offline; to share their taste in music, movies and online games ; to offer support to adolescents who lack support in the offline environment (for example LGBTQ adolescents or

adolescents with a disability or disease); as a source of information and advice; and lastly they look up answers to health uncertainties.

- *Digital media context: Disadvantages*

The digital media context can also provide a negative setting, seeing that adolescents may feel pressured to self-disclose. They can receive negative feedback from peers, and they can be exposed to unhealthy social comparisons (Shapiro & Margolin, 2014). Allen et al. (2014) state that young people can be exposed to cyber ostracism (being ignored or excluded in cyberspace), increased loneliness and a search for their identity online could leave them vulnerable to insensitive messages. Cohen-Almagor (2018) found in a recent study conducted in the UK that 40% of the participants felt badly if no-one liked their selfies and 35% connected their self-confidence directly to the number of social media followers they have. Carrol and Kirkpatrick (2011) add to this list by stating that social media might have a negative effect on the mental health of adolescents; they can be exposed to illegal content or they could violate another person's privacy. The effect CB has on adolescents MWB is discussed in Chapter 3 (3.4).

2.4 SUMMARY

In this chapter concepts such as school violence, aggression, traditional bullying and CB, victim and bully were clarified, the nature of cyberbullying as a unique form of bullying was explored, the demographic factors related to CB were discussed and legal aspects pertaining to CB were highlighted. Adolescence was clarified as a concept and then discussed from a multidimensional developmental perspective to explain why adolescents are prone to engaging in cyberbullying activities. In Chapter 3, the concepts MWB and mental illness (specifically MDD) are discussed, as well as the effects of cyberbullying on the MWB and level of depression of adolescents.

CHAPTER 3

MENTAL WELL-BEING AND MENTAL ILLNESS

3.1 INTRODUCTION

In this chapter, the fundamental concepts related to MWB are clarified. Thereafter, a Positive Psychology perspective of MWB is proposed and the mental health continuum (MHC) is discussed in depth. Subsequently, mental illness and depressive disorders are positioned as points on this continuum and the diagnostic criteria for a MDD are outlined. The aetiology of MDD and its prevalence among adolescents are also explored. Lastly, the effect CB has on adolescents' MWB and levels of depression is discussed.

3.2 MENTAL WELL-BEING

3.2.1 Concept clarification of mental well-being

The terms MWB and psychological well-being (PWB) are used as synonyms in this study. The reasoning behind using the term MWB in this study, and not PWB, is because we used the three-way model of Keyes (2013) and the MHC (see 3.2.2.1), as key components in this study. The term MWB includes the presence of positive psychological resources, including components of both hedonic or subjective well-being, and eudaimonic well-being (Diener, 1984), but also the social well-being components of Keyes (2013). In this section the following concepts are clarified: MWB, hedonic well-being and eudaimonic well-being.

3.2.1.1 *Mental well-being (MWB)*

According to the World Health Organization (WHO), mental health or well-being forms part of the larger concept of health (WHO, 2007): “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (p.1) or in the context of this study, the absence of mental illness. The WHO’s definition stresses the positive dimension of mental health or MWB, and defines it as “a state of optimal well-being in which the individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2007, p.1).

3.2.1.2 *Hedonic well-being*

The hedonic well-being exemplifies that human beings are keen to maximise their positive and enjoyable feelings, while minimising any negative and unlikeable feelings

(Keyes, 2013) – it thus asks how good a person feels, i.e. their emotional well-being. Hedonic well-being can be described as a cognitive and affective evaluation that individuals construct about the quality of their lives, and is thus subjective in nature (Diener, Lucas & Oishi, 2002; Keyes, 2013).

3.2.1.3 Eudaimonic well-being

The eudaimonic perspective of well-being, contrary to hedonic well-being, argues that well-being consists of more than just happiness – it asks how well a person is functioning as an individual (PWB) (Ryff, 1989), but also within society (social well-being) (Keyes, 2008, 2013). Eudaimonia thus comprises a person's psychological and social well-being. It includes that human beings are attentive to developing their promising abilities and that they define well-being in terms of the degree to which a person is fully functioning (Deci & Ryan, 2008).

This MWB component of the study was conceptualised by means of a Positive Psychology perspective as set out below.

3.2.2 A Positive Psychology perspective of mental well-being

MWB forms part of the broader scientific field of Positive Psychology, which is imbedded in the concepts of salutogenesis and fortigenesis (Seligman & Csikszentmihalyi, 2014; Wissing, 2013). The concept salutogenesis (Latin *salus* = health + Greek *genesis* = origin) was coined by Antonovsky in 1979. The term is used to describe the origins of health instead of the origins of disease. Strümpfer expanded the concept of salutogenesis to fortigenesis (Latin *fortis* = strong Greek *genesis* derived from *gen*, meaning “to be produced”, which is the root of *gignomai*, meaning “to become”) in 1995. Fortigenesis refers to the origin of psychological strength or well-being in general (Strümpfer, 1995; Wissing, 2013). Peterson, (as cited in Gilman, Huebner & Furlong, 2009, p.4) describes Positive Psychology as “the scientific study of what goes right in life, from birth to death and all stops in between and takes seriously those things in life that makes life worth living”.

Ryff and Singer (1998) note that research on health was one-sided for a long time. Health was associated with the absence of illness, instead of the existence of wellness. Formerly it was thus assumed that mental health is the opposite of mental illness, thus if mental illness is not present, then mental health inevitably is. Keyes (2005, 2013) enlightens this thought process by stating that mental health and mental illnesses are not opposite ends. When mental illnesses are non-existent, it does not necessarily imply that mental health is present. On the contrary, if mental illness exists, it does not necessarily imply the absence of

mental health. Gilman et al. (2009) agree with this notion and argue that research on optimal functioning goes beyond the typical focus in psychology on “what goes wrong” in humans. Furthermore, Keyes (2013) argues that the biased focus on the presence and absence of mental illness should be revised and proposes that the presence and absence of MWB should be embraced simultaneously. The MHC was thus developed by Keyes (1998, 2002, 2003, 2005, 2013) to propose a more holistic concept of MWB and it served as a useful framework to measure MWB in this study.

3.2.2.1 *The mental health continuum*

The MHC of Corey Keyes (2013) includes mental illness on a horizontal axis, but also both hedonic and eudaimonic perspectives on a vertical axis (Khumalo, Temane & Wissing, 2012). The continuum is presented in Figure 3.1 below. This dual-continuum model has a twofold function; individuals can be categorised according to their mental illness status, as well as according to their level of mental health.

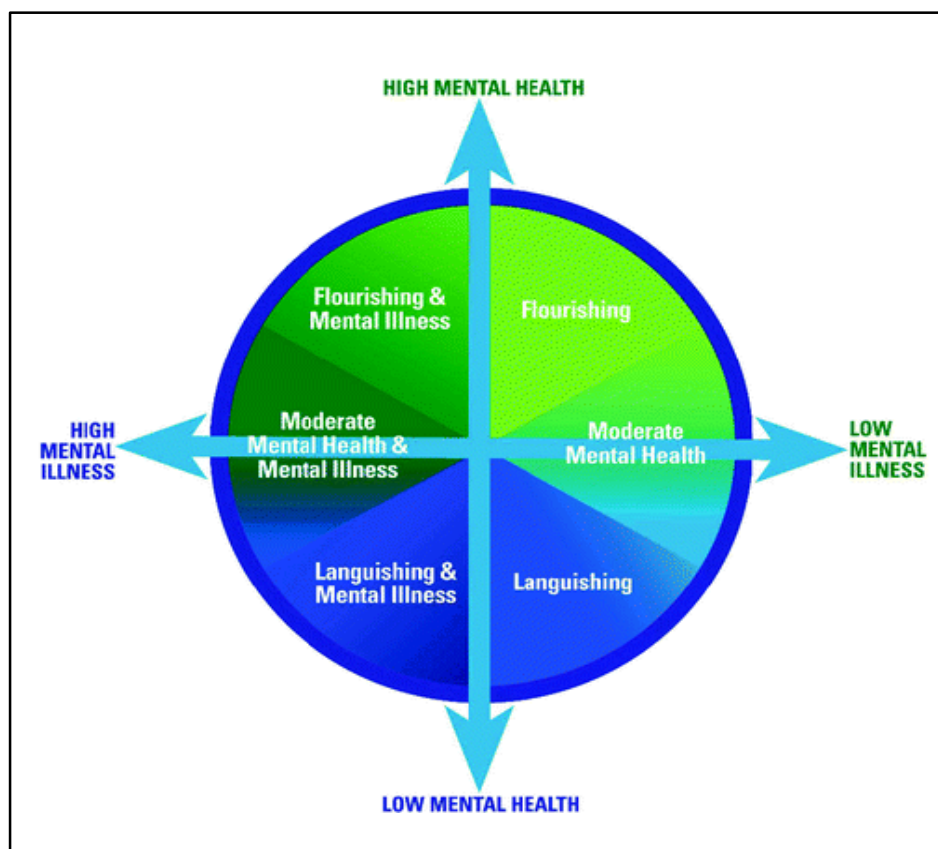


Figure 3.1: Mental health continuum (Keyes, 2013, p. 17)

According to Keyes (2013), the mental health of a person can be either languishing, moderate or flourishing. Flourishing can be described as the complete or optimal state of

mental health in which individuals are free of psychopathology (Keyes, 2002, 2003), with high levels of emotional, psychological, and social well-being. Moderate mental health is when a person's mental status is neither flourishing nor languishing (Keyes, 2013).

Languishing is when a person experiences feelings of emptiness and lacks interest in life, even if mental illness is absent. The mental health of such a person is in an unhealthy status.

Keyes suggests a three-way model of MWB, encompassing three components: hedonic well-being, referring to emotional well-being; and eudaimonic well-being, which refers to both psychological and social well-being. Our understanding of this is illustrated in Figure 3.2.

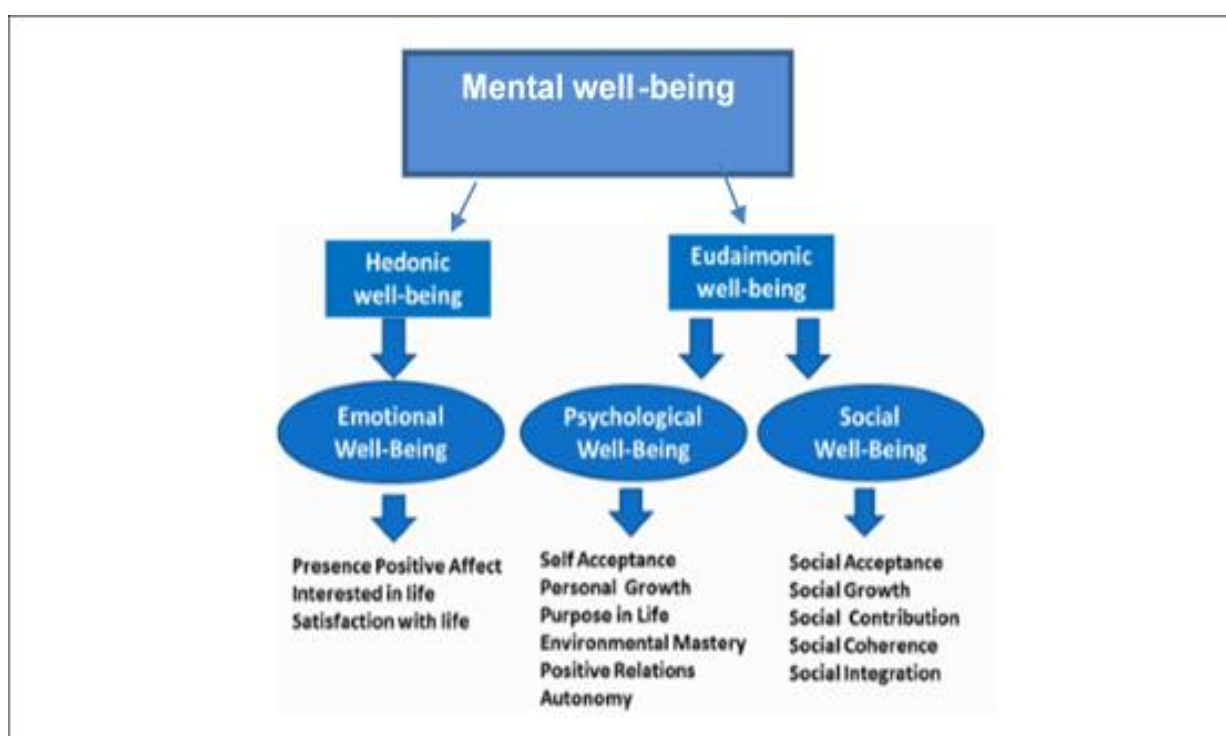


Figure 3.2: Mental well-being (drawing on Diener, Emmons, Larsen & Griffen, 1985; Keyes, 1998, 2002, 2003, 2005, 2013; Deci & Ryan, 2008).

3.2.2.1.1 Hedonic well-being

As illustrated in Figure 3.2, hedonic well-being, otherwise also known as emotional well-being (EWB), is fleeting and reflects how well a person feels. It comprises the following components: positive affect, negative affect and life satisfaction (Diener et al., 1985). Positive and negative affect refer to the emotional aspect of subjective well-being and the life satisfaction component refers to the cognitive-judgemental aspect (Diener et al., 1985). Fredrickson (2004) conceptualises positive emotions as moments of joy, interest, satisfaction and love, whereas negative emotions comprise of feelings of sadness, anxiety and anger.

When people experience a balance between their positive and negative emotions, it is called affect balance. This has a positive effect on their subjective well-being. Life satisfaction is when a person is in a state of contentment with his past or present life and in all areas of life (Haidt & Keyes, 2003).

3.2.2.1.2 *Eudaimonic well-being*

Psychological well-being

Eudaimonic well-being, also known as psychological well-being (PWB), is more permanent in nature and reflects how well a person is functioning. Therefore, PWB is different from subjective well-being, since individuals have to self-report on the quality of their functioning and not their feelings about their lives. PWB, according to Ryff (1989) (see Table 3.1 below), involves six key intrapersonal dimensions, namely self-acceptance, personal growth, purpose in life, environmental mastery, positive relations, autonomy (Deci & Ryan, 2008; Ryff, 1989).

Table 3.1:

Dimensions of Psychological Well-Being (Ryff, 1989)

Dimension	Description
Self-acceptance	When persons hold positive attitudes about themselves and of their past lives. Self-acceptance is seen as the central characteristic of positive psychological functioning.
Positive relations with others	When an individual has warm and trusting interpersonal relationships with others.
Autonomy	When a person does not look to others for appreciation, but is able to form their own beliefs, has an internal locus of control and strives towards individualisation.
Environmental mastery	An individual's ability to improve/master the environment in order to address their psychological needs. A healthy person can make use of the opportunities provided by his or her environment and make favourable changes.
Purpose in life	When a person believes his/her life has meaning. Functioning positively implies that a person has goals and plans for the future and a sense of direction.

Personal growth	When an individual continues to advance and grow as a person by developing his/her potential. When a person is open to new experiences it indicates that he/she is a fully functioning person.
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Social well-being

Social well-being (SWB) includes intrapersonal components such as social integration, social acceptance, social contribution, social actualisation and social coherence. Social well-being is the assessment of one's status and functioning within society (Keyes, 1998; Keyes, 2013) and it includes certain social well-being aspects that constitute a person's social wellness (see Table 3.2 below).

Table 3.2:

Aspects of Social Well-Being (Keyes, 1998; Keyes 2013)

Aspects	Description
Social integration	When an individual assesses his/her connection with the community and the broader society. Healthy persons feel that they have something in common with others, that they belong in their community, and that they are part of the wider society.
Social acceptance	When a person understands, accepts and feels comfortable with their own qualities (good or bad) and those of others.
Social contribution	The assessment of one's value in society. A healthy person feels that he/she is making a valuable contribution to society.
Social actualisation	When a person evaluates the condition and future of society. Healthy people feel optimistic about society; they are of the opinion that society has the potential for social growth.
Social coherence	How an individual perceives the social world. Healthy individuals evaluate the quality, organisation and operation of the social world and have a desire to know more about the world.

It is well known that, among others, one of the startling negative consequences of being bullied is MDD (UNESCO, 2017). Mental illness as a consequence (Schneider et al., 2012; Vaillancourt, Faris & Mishna, 2017) and even a cause of CB (Pingault & Schoeler, 2017) is explored next.

3.3 MENTAL ILLNESS

3.3.1 0078 Concept clarification of mental illness

The following concepts are clarified: mental illness and MDD.

3.3.1.1 *Mental illness*

Mental illness as opposed to MWB is described by the American Psychological Association (APA, 2013) as the presence of a mental disorder. This is when a person presents clinically recognisable symptoms or behaviour related to psychological or mental distress. These symptoms or behaviours interfere significantly with a person's daily functioning (Colman, 2009).

Although the emotional consequences of CB and traditional bullying can often include anxiety, this study focuses on depression as a mental illness because in South Africa, the suicide rate among adolescents is an alarming 9,5%, 60% due to depression (Khan, 2017). Wang, Nansel and Iannotti (2011) determined that victims of CB are more prone to depression than victims of traditional bullying. According to the DSM-V (APA, 2013), there are a few types of depressive disorders, namely disruptive mood dysregulation disorder, MDD, single and recurrent episodes, persistent depressive disorder (dysthymia), premenstrual dysphoric disorder, substance/medication-induced depressive disorder, depressive disorder due to another medical condition, and other specified or unspecified depressive disorders. Of these mental illnesses, *MDD* is the most prevalent mental illnesses associated with CB (UNESCO, 2017) and the developmental stage of adolescence (Cohen-Almagor, 2018). For the purposes of this study, the researcher therefore focused on MDD.

3.3.1.2 *Major depressive disorder (MDD)*

According to the DSM-V (APA, 2013), the common definition of a MDD is “the presence of sad, empty, or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function (p. 155).” It is characterised by discrete episodes of at least two weeks' duration (although most episodes last considerably longer). If untreated, an episode can last for four to nine months (Barlow & Durand, 2015). A person can experience MDD episodes once, twice, or several times during their lifetime (SADAG, n.d.). The clinical diagnostic criteria of MDD are listed in 3.3.3.

3.3.2 Aetiology of major depressive disorder (MDD)

To understand the aetiology of MDD as a form of mental illness, an integrative model that includes biological, social-psychological, family and peer influence determinants could be offered (Wicks-Nelson & Israel, 2013). A *biopsychosocial model* is used to explain the causes of depression, as the biological, psychological and social factors are all intertwined and equally important (Nemade, Reiss & Dombeck, n.d.). Since this study took place in South Africa, it is necessary to take a step further with regard to the aetiology of depression, since our culturally diverse society should be taken into consideration (Botha & Moletsane, 2018). An African perspective is therefore provided as well. The *African personality model* is discussed after the biopsychosocial model.

3.3.2.1 A biopsychosocial model of depression as a mental illness

3.3.2.1.1 Biological determinants

The biological determinants of mental illness include genetic influences, brain functioning and neurochemistry, and temperament (Wicks-Nelson & Israel, 2013). Genetic influences suggest that in some cases an adolescent could be predisposed to depression onset due to a family history of depression (Wicks-Nelson & Israel, 2013, Nemade, Reiss & Dombeck, n.d.). Irregularities of the neuroendocrine system can also be an important risk factor for MDD onset. According to Jeon, Amidfar and Kim (2017) and Kroning and Kroning (2016), imbalances of the monoamine neurotransmitter system (norepinephrine, serotonin and dopamine) in the brain of MDD patients have been reported in many studies. Another biological factor can be if a person suffers from a chronic medical disease (e.g. diabetes, cancer or hypothyroidism) (Jeon, Amidfar & Kim, 2017; Nemade, Reiss & Dombeck, n.d.). The abuse of certain chemical substances can also predispose someone to depressive episodes, for e.g. daily smoking, smoking of Marijuana and excessive alcohol abuse (Schuler, Vasilenko & Lanzac, 2015).

3.3.2.1.2 Psychological determinants

If an individual exhibits fixed irrational and negative patterns of thinking, insufficient coping skills, judgement problems and low emotional intelligence (to identify, understand and express emotions well), he/she might also struggle with depression (Nemade, Reiss & Dombeck, n.d.). These psychological factors could be due to biological factors (temperament) or social factors (e.g. coping models modelled by parents and teachers). However, Jeon, Amidfar and Kim (2017) state that all personality types can develop MDD.

3.3.2.1.3 *Social determinants*

Roberts (2015) states that most adolescents still need their families (parents) to fulfil their basic physical and psychological needs. If an adolescent does not experience family support and/or if there is constant family conflict, the adolescent might be more prone to depression. It is a well-known fact that a stressful life event could lead to a first MDD episode (Jeon, Amidfar & Kim, 2017), for instance if a person is exposed to early separation, lack of social support, or bullying. These events can serve as triggers for depression onset (Nemade, Reiss & Dombeck, n.d.). According to SADAG (n.d.), adolescents experience a stressful life event just as they enter puberty since they have to enter secondary school and form new peer groups. The school context plays a crucial role in relation to MDD. Schools are responsible for having bullying policies in place according to the Schools Act and teachers are responsible for safe learning environments (see 2.2.4.1.6). If the school environment is not healthy, adolescents could possibly experience CB and develop MDD. Health promotion in schools is discussed in Chapter 6 (see 6.5.1.1).

3.3.2.2 *African perspective on mental illness*

The African personality model (Botha & Moletsane, 2018) elucidates that mental disorders occur when a person's lines of interpersonal connection with their ancestors and higher powers are disrupted (see Figure 3.3). In order to make a proper diagnosis, one must find out exactly where these disturbances in connection lines have occurred.

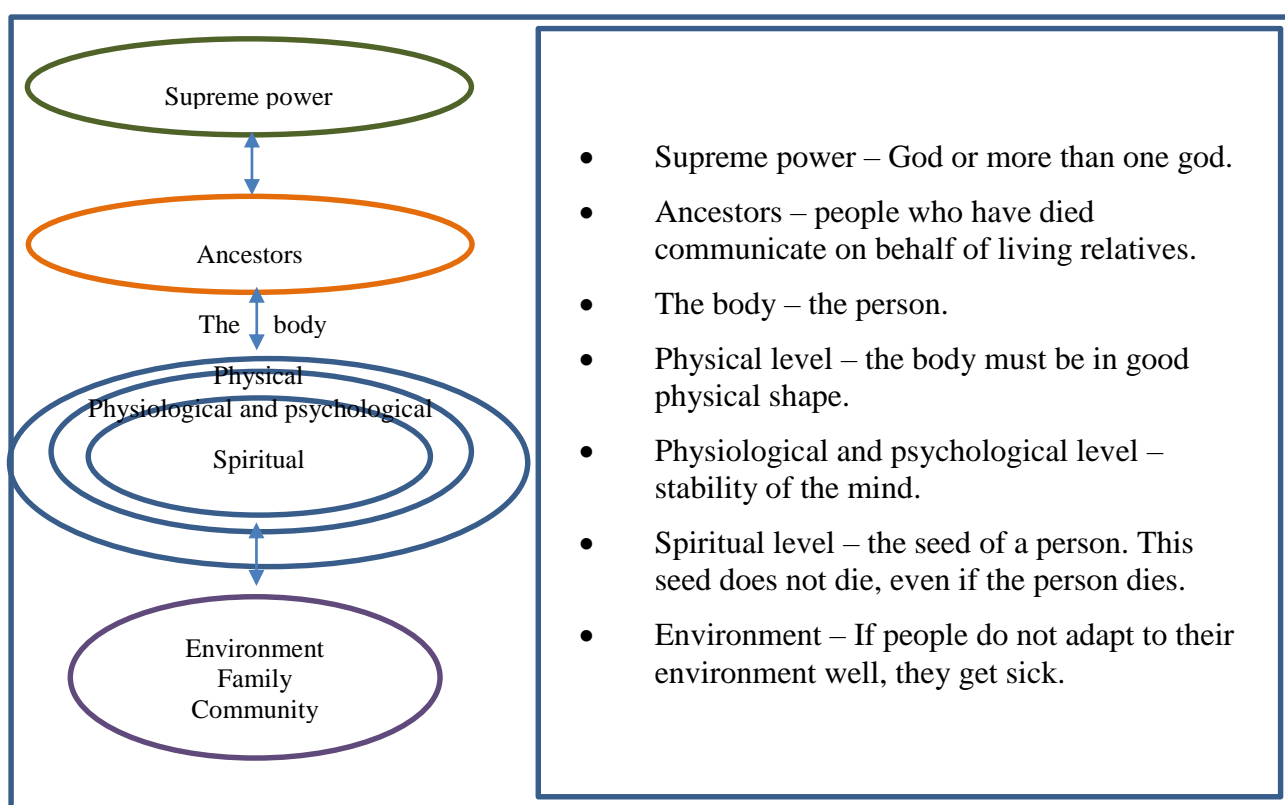


Figure 3.3: African model of personality (Botha & Moletsane, p. 70, 2018)

As illustrated in Figure 3.2, there is a strong connection (the arrows illustrate the connections) between the person, the supreme power, the ancestors and the environment. If these connections are not firmly held, the person is in a state of imbalance. As long as the connections between the lines are weak, the person is unhappy and could get sick or develop mental illness, for example a MDD. Therapy and/or indigenous medicine is then necessary to reinstate the “connection lines” of the person (Botha & Moletsane, 2018).

3.3.3 Diagnostic criteria of major depressive disorder (MDD)

Even though MDD is seen as a common disorder, it is severe since it affects a person across social, cognitive and health areas (Jankowski, Batres, Scott, Smyda, Pfeifer & Quevedo, 2018). MDD manifests in a combination of symptoms that interfere with the depressed person’s ability to work, sleep, eat, and enjoy activities once experienced as pleasant (SADAG, n.d., Kroning & Kroning, 2016). The potential impact of MDD can thus not be disregarded. In 2015, WHO ranked depression as the single leading contributor to global disability (WHO, 2017).

The DSM-V (APA, 2013) provides specific diagnostic criteria for MDD symptoms. The Patient Health Questionnaire (PHQ-9) is based on the DSM-V diagnostic criteria (Kroenke, Spitzer & Williams, 2001) and was included in this study to screen for MDD (see Addendum A). According to the DSM-V (APA, 2013, p.160–161) MDD can be diagnosed if a person experiences five (or more) out of the following nine symptoms during the same two-week period (one-week period for children and adolescents). It can also be diagnosed if the person sees a change from previous functioning and at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure, and:

- Depressed mood specified by the depressed person or reported by others. This mood is characterised by feelings of sadness, emptiness, hopelessness, irritability, or restlessness
- Noticeably diminished interest or pleasure in all or almost all activities

- Significant weight loss when not dieting, or weight gain (5% of the person's body weight within a month)
- Struggling to sleep, or too much sleeping
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Feelings of worthlessness and excessive or inappropriate guilt (which may be delusional)
- Reduced ability to think or concentrate, or indecisiveness
- Repeated thoughts of death, suicidal ideation (with or without a specific plan), or a suicide attempt

3.3.4 Prevalence of depressive disorders among adolescents

Adolescents are, according to developmental epidemiological research, a vulnerable group for depression onset (Jankowski et al., 2018). Moreover, apart from the above diagnostic criteria, depression might be difficult to diagnose in adolescents because adults might presume they will act sad, whereas they often mask their depression with moodiness, irritability and acting out behaviour. Therefore, MDD in adolescents are regrettably often overlooked (Kroning & Kroning, 2016). Moreover, adolescents do not always comprehend or express their own feelings very well (Mental Health America, n.d.). Additional symptoms to the above list that are applicable to adolescents (SADAG, n.d. & Mental Health America, n.d.) are as follows: poor academic performance in school; withdrawal from friends and activities; anger and rage, overreaction to criticism, feelings of being unable to satisfy their ideals; poor self-esteem or guilt; substance abuse and problems with authority.

In adolescents, the median age that MDD commences is 15.5 years (Wicks-Nelson & Israel, 2013). Interesting to note is that three quarters of young adults with psychological and psychiatric disorders already developed their symptoms as a child or during early adolescence (Roberts, 2015). The ratio between female and male depressed adolescents are 2:1. Reasons for this large gap could be differences in temperament and emotional regulation, negative cognitive and coping styles, greater need for affiliation, dependency on relationships, biological and/or hormonal changes during sexual maturity, and genetic depressive vulnerability. According to Mental Health America (n.d.) and Roberts (2015), one in five

adolescents suffer from depression at some or other time. The percentage of USA secondary school learners who experienced persistent feelings of sadness or hopelessness increased considerably from 2007 (28,5%) to 2017 (31,5%) (Centres for Disease Control and Prevention, n.d.). SADAG found that a staggering number of South African adolescents struggle with feelings of hopelessness and sadness, at least 23,6% (SADAG, 2014).

One major consequence of MDD among adolescents is the fact that depressed adolescents often become involved in substance (tobacco, alcohol and drugs) abuse, promiscuous sexual behaviour and risk-taking behaviour (SADAG, n.d.). The most severe consequence of depression among adolescents is successful *suicide*. Individuals aged 15–29 are the most at risk for attempting or committing suicide worldwide – it is the second leading cause of deaths worldwide in this age group (WHO, 2018). According to the Centres for Disease Control and Prevention (n.d.), the percentage of USA learners who seriously considered attempting suicide increased significantly from 14,5% in 2007 to 22,1% in 2017. In South Africa, 9,5% of all adolescent deaths are suicide related and a third of all hospital admittances for suicide attempts involve adolescents (SADAG, 2014). In the next section, the effects of CB (a risk-taking behaviour) on the MWB and level of MDD of adolescents is discussed.

3.4 EFFECTS OF CYBERBULLYING ON THE MENTAL WELL-BEING AND LEVEL OF DEPRESSION OF ADOLESCENTS

The work of Hinduja and Patchin (2009), Mirsky and Omar (2015), Chassiakos et al., 2016 and Vaillancourt et al. (2017) reveal that CB affects the overall well-being of a person. Both bullies and those who are bullied or cyberbullied may experience the following signs and symptoms: school truancy, academic problems, lower self-esteem, increased depression and/or anxiety, suicidal ideation and suicide attempts, health problems such as stomach aches and headaches, sleeping problems and nightmares, withdrawing from friends and family, scared, abrupt anger or rage, frustration and self-destructive actions such as cutting. According to The Children's Society (n.d.), if an adolescent already has a negative belief about him or herself and they receive negative messages on social media platforms, it could reinforce this belief. Adolescents revealed in The Children's Society's (n.d.) study that they are continuously checking their messages and likes – this heightens their anxiety and lowers their self-esteem immensely.

Wang, Nansel and Iannotti (2011) determined that victims of CB were more prone to depression than victims of traditional bullying. According to Mirsky and Omar (2015), some victims can carry these psychological symptoms into adulthood. The prevalent depression could be due to the fact that the identity of the attacker is in some cases unknown. The anonymity of the attacker creates feelings of isolation and helplessness for the victim (Khan, 2017). In South Africa, the suicide rate among adolescents is an alarming 9,5%, 60% due to depression (Khan, 2017). Hinduja and Patchin (2009) warn that there has been an increase in suicides related to bullying or CB, known as cyberbullicide. Two cases that recently appeared in the media could be mentioned to sketch the picture of cyberbullicide. In Florida, USA, a 12-year-old hung herself after she was cyberbullied by two other adolescents. The one cyberbully told her “If you’re going to do it, just do it” after she mentioned her suicide ideation to him (Dearan, 2018). In Texas, USA, an 18-year-old girl shot herself in front of family members after she was cyberbullied for months (Pasha-Robinson, 2016). As mentioned in Chapter 1, a young South African girl committed suicide after being bullied on a WhatsApp group (Gous, 2019).

The occurrence of CB, however, is not usually the main reason why teens commit suicide. Most suicidal teens experience other life stressors concurrently with the CB, yet CB seems to initiate the suicidal behaviour and thoughts (Hinduja & Patchin, 2009). If adolescents experience both online and offline bullying, they are more at risk for committing suicide (Hinduja & Patchin, 2018). Some adolescents have pre-existing mental health issues such as depression, social anxiety and extreme loneliness. This enhances their risk for suicide ideation or attempts if they are bullied (Pingault & Schoeler, 2017). According to Hinduja and Patchin (2018), even though there are tragic examples of cyberbullicide, most adolescents exposed to CB do not commit suicide. Nonetheless, Gordon (2018b) asserts that because bullying can be a catalyst for suicide, the risk should not be overlooked, especially when adolescents have pre-existing mental health issues. Pingault and Schoeler (2017) concur by stating that the existing suicide cases show the potential extreme consequence CB could have. It is therefore urgent that the effect of CB on the mental health of adolescents should be investigated.

As mentioned in the introductory chapter, little is known about the mental health and emotional well-being of the bully. According to Anti-bullying Alliance (n.d.), it is hazardous to label bullies as strong, emotionally detached and malicious, since this labelling provides little understanding of the underlying difficulties the bully might experience, nor does it

provide possible reasons for the bullies' behaviour. Bauman, Toomey and Walker (2013) mention that some bullies, mainly males, experience feelings of guilt if a joke or comment they made on social media reached multiple parties and the harm (intended or unintended) to the victim escalated beyond their control. According to Brailovskaia, Teismann and Margraf (2018), positive mental health can significantly reduce the impact of CB, it may thus be beneficial to include well-being in clinical and preventive programmes for adolescents. This notion is explored in Chapter 5 (5.4.2).

3.5 SUMMARY

This chapter defined MWB, discussed the origin of MWB from a Positive Psychology perspective and explained the MHC. Mental illness was defined and the aetiology of MDD was discussed by referring to the biopsychosocial model and the African personality model. The diagnostic criteria for MDD were outlined and the prevalence of MDD among adolescents was discussed. Lastly, the effects of CB on the MWB of adolescents (victims and bullies of CB) and levels of MDD were discussed. Chapter 4 outlines the research paradigm and research methods and explores validity and reliability of instruments, after which it highlights the ethical considerations relevant to this study.

CHAPTER 4

EMPIRICAL RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This chapter commences by delving into the research paradigm and assumptions that informed this survey research design. A breakdown of the research methods used to conduct the research design is provided. The discussion then turns to the validity and reliability of the data collection methods. Lastly, the chapter discussed the ethical aspects that were carefully considered in this study.

4.2 POST- POSITIVIST PARADIGM

The word *paradigm* originates from Greek, meaning *pattern*. In educational research the term paradigm is commonly used to describe a researcher's "worldview" (Kivunja & Kuyini, 2017). A research paradigm is "a worldview or perspective held by a community of researchers that is based on a set of shared assumptions, concepts, values and practices" (Johnson & Christensen, 2014, p.31). Similarly, Guba and Lincoln (2005) refer to paradigms as worldviews or belief systems. These philosophical considerations guide researchers and precede determining the choice of methods and approaches they decide to use. A *post-positivist paradigm* was used in this study because this paradigm is suitable for Social Sciences (Antwi & Hamza, 2015).

According to Mertens (2015), even though the positivist focus on empirical and objective data attracts many researchers, when researchers want to observe human behaviour, the positivism paradigm falls short. Therefore, post-positivistic psychologists rejected the narrow view of positivism, and post-positivism came to the fore. Creswell (2018) states that post-positivism developed as a reaction to positivism since it challenges the traditional view of the absolute truth of knowledge. Post-positivism acknowledges the fact that when one studies human behaviour, one cannot be absolute about one's claims of knowledge. Philips and Burbules (2000) in Creswell (2018) stipulate five key assumptions of post-positivism: knowledge is speculative, because the absolute truth can never be found; in the research process, the researcher conveys certain claims, then later on refine or abandon some of them as other claims become more defensible; data, evidence and rational considerations influence knowledge; in order to explain a certain phenomenon or to describe the casual relationship between variables, the researcher wishes to develop relevant and true statements; and lastly,

researchers must evaluate methods and conclusions for prejudice, since objectivity is a key aspect of proficient research.

4.2.1 Ontology of this study

Ontology is “the philosophical study of the nature of existence or reality, of being or becoming, as well as the basic categories of things that exist and their relations” (Kivunja & Kuyini, 2017, p. 27).

The difference between positivism and post-positivism regarding ontology is the way these two paradigms perceive *reality*. The positivists believe that the researcher should discover reality (naïve realism) and post-positivists believe that reality does exist, but because of human limitations it can only be known inadequately (*critical realism*) (Mertens, 2015), but that one should at least try in order to effect change. Critical realism furthermore recognises that the researcher’s observations might involve error and that theories can be altered (Chilisa & Kawulich 2012). Maree (2016) proposes that the post-positivistic researcher conceptualises reality as an entity that is not fixed, and sees reality as formed by the individuals in the specific research study. Furthermore, this reality is influenced by the individual’s specific context, for example culture, gender, age, language and quality of education (*social constructivism*). Thus, the social constructivist and critical realist world views acknowledge that human interactions and the complexity of the society can influence reality. This view gave rise to the belief that all eco-systems are interconnected and influence each other – from there the use of Bronfrenbrenner’s well-known bio-ecological model in this study (see 1.7) (Donald, Lazarus & Moola, 2014). The ontological view of this study is critically socio-constructivist in nature. We wanted to explore a phenomenon, but also effect change.

4.2.2 Epistemology of this study

The word *epistemology* originates from Greek, where the word *episteme* means *knowledge*. Thus, epistemology describes how we come to know something and how we know the truth or reality (Kivunja & Kuyini, 2017). The researcher came to “know” the effect CB has on the MWB of adolescents by conducting a survey (see 4.2.3). According to Mertens (2015), positivists assume that the researcher and the participant are completely independent from one another, whereas post-positivists believe that the theories, hypotheses and the background knowledge that the researcher possesses can strongly influence the research outcome. *Objectivity* is thus key to the post-positivism paradigm and researchers should not

allow their personal biases to influence the research outcome. They should stay neutral and follow prescribed procedures meticulously. Post-positivists believe that perfect objectivity is within reach, but not 100 percent feasible (Chilisa & Kawulich, 2012). In this study objectivity was achieved as far as possible, since the participants filled in an electronic/hard copy of the survey in the comfort of their own homes (see 4.3.2). The researcher could thus not influence the participants' response. From there, the data were captured and analysed by the Statistical Consultation Services (North-West University) (see 4.3.3). According to Maree (2016), all measurements are fallible, therefore the post-positivist stresses the importance of using multiple measures and observations to obtain knowledge. Due to this important aspect, this study included three different questionnaires in the survey (see Addendum A). The researcher realised that a mixed-method study would have provided deeper insight into the phenomenon, but the decision was made that a survey design is sufficient for a master's study. The research design and methodology used in this study are discussed next.

4.2.3 Methodology of this study

The methodology of a study can be described as the manner in which the researcher goes about to obtain the desired knowledge and understanding (Mertens, 2015). In this study a quantitative methodology was used. Maree and Pietersen (2016) define quantitative research as "a process that is systematic and objective in its ways of using numerical data from only a selected subgroup of a universe (or population) to generalise the findings to the universe that is being studied." (p.162). Creswell (2018) defines a research design as a type of inquiry into the different research approaches (quantitative, qualitative or mixed methods) which provides the researcher with specific processes to follow. To reach the aims of this quantitative study, a survey research design was implemented. A survey design can be defined as a research strategy that uses surveys and that provides the researcher with a numeric description of a population's trends, beliefs or opinions (Creswell, 2018).

Cohen, Manion and Morrison (2013) offer reasons as to why survey designs can be seen as a useful strategy. These reasons include that data can be collected in one phase – the process is thus economical and efficient; numerical data are generated; it provides the researcher with descriptive, inferential and explanatory statistics, key factors and variables can be manipulated to develop frequencies; standardised information is collected; correlations can be determined; data can be captured from multiple choice, closed questions as well as observation schedules; accurate instruments can be generated via pilot testing and

amendments; and lastly, this method relies on large-scale data collection in order to make generalisation possible. Initially, this study made use of an online option (Google Forms), because Fraenkel, Wallen and Hyun (2012) state that internet-based surveys provide advantages such as enhanced convenience, fewer expenses, a quicker turnaround, multimedia interface, the possibility of using different portable devices and completed data records. The biggest advantage for this study was that of ensuring privacy and confidentiality given the sensitivity of the topic and our study population. The disadvantages included aspects such as a poorer response rate and inaccurate data entry due to quick responses aided by computers. Since poor response rates initially affected this study, an alternative hard copy of the survey (see 4.3.1.3) was made available to prospective participants at a second data gathering round. The research methods used to conduct the survey design are discussed next.

4.3 RESEARCH METHODS

Research methods include the data collection, analysis and interpretation that the researcher plans to implement (Creswell, 2018).

4.3.1 Recruitment and sampling strategy and procedures

The recruitment and sampling strategy and procedures that were followed in this study consisted of three phases that are each discussed separately and are illustrated in Figure 4.1.

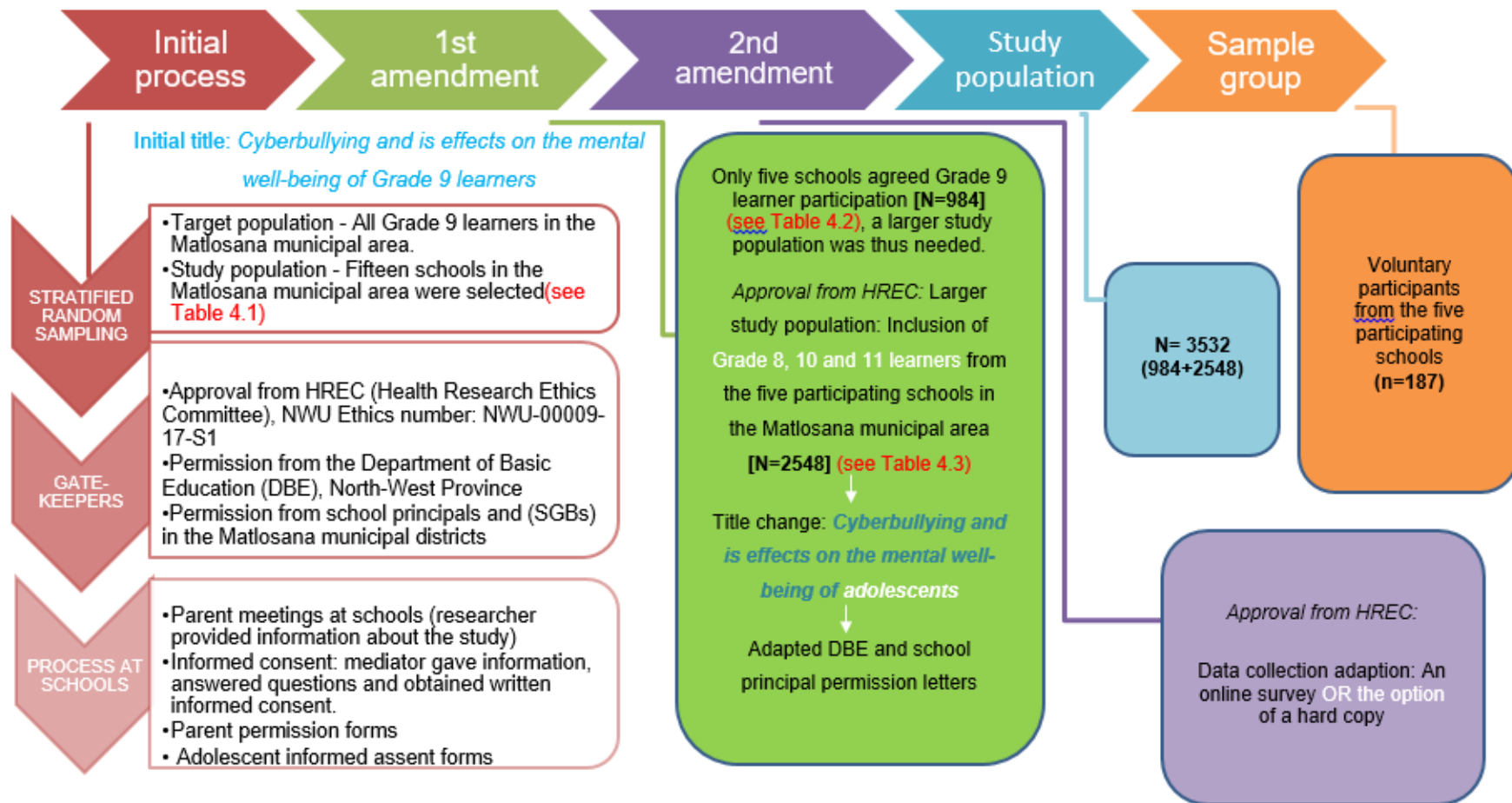


Figure 4.1: Participant recruitment process

4.3.1.1 Initial process of sampling

4.3.1.1.1 Stratified random sampling

The *target population* group for this study initially consisted of all Grade 9 learners from the 28 secondary schools in the Matlosana municipal area (see Table 4.1), but it was later extended to also include Grade 8, 10 and 11 learners (see 4.3.1.2 and Table 4.3). Due to time and money constraints, a *study population* of 15 schools in the Matlosana municipal area was composed by means of a stratified random sampling strategy (Maree, 2016). This selection was done by means of the size (strata) of the schools. Five large (more than 1 200 learners per school), five medium (between 850 and 1 200 learners per school) and five small (fewer than 850 learners per school) were (randomly) selected. This selection process ensured that all the secondary schools in the Matlosana municipal area had a fair and equal chance to be selected. However, not enough schools were chosen to ensure a fully representative random sample. Therefore, no power calculation was done, but the decision was made to handle the study sample as a specific population, making sure that enough participants were recruited to make statistical justifiable analysis. The researcher predicted that more or less 5% of the study population would respond, since Cohen et al. (2013) state that the typical response rate for internet surveys are 10% or lower. The initial *study population* for this study totalled to $\pm 3\ 000$ Grade 9 learners (see Table 4.1).

Table 4.1:

Participant Recruitment: Grade 9 Study Population

School size	Groups	Number of schools	Number of learners	Target population	Study population
>1200	Group 1	11	14926	2985	1357
850–1200	Group 2	8	7778	1556	972
<850	Group 3	9	6173	1235	686
Total		28	28877	5775	3015

4.3.1.1.2 *Gatekeepers*

After the study had been approved by the scientific committee of the niche area COMBER, ethics clearance was given by HREC (see Addendum D) and ministerial consent was obtained (see Addendum E) because the study was planned for children with no direct benefit. Thereafter the researcher requested permission from the North West Department of Education (see Addendum F). From there the researcher e-mailed the principals of the schools selected by the stratified random sampling, seeking approval to conduct the study. Five principals said that the researcher could come and see them about the prospective study. The researcher went to the respective schools and informed the principals about the aims and nature of the proposed study. Thereafter the principals signed approval (see Addendum G). The principals were asked to act as gatekeepers and they appointed mediators for this study.

4.3.1.1.3 *Recruitment process at schools*

The principals organised parent meetings at the schools where the researcher had the opportunity to provide the necessary information regarding the proposed study to the parents of the Grade 9 learners. After the parent meeting had been held, parents and Grade 9 learners from these selected schools received parent permission forms (Addendum H) and adolescent consent forms (Addendum I) in sealed envelopes from the mediators. Prospective participants were asked to send back these letters one week after they received it. The learners who volunteered to participate in this study handed in their signed forms to the mediators. Parents had to indicate on the consent form that the learner does have a mobile phone and access to the internet. The parents also filled in an e-mail address and cell phone number to which the researcher could send the link of the survey in order for the participant to complete it. After the initial recruitment process, five schools gave permission to participate in the study, **N=984** (see Table 4.2).

Table 4.2:

Participant Recruitment: Participating Schools

	Gr 9 learners
School A	182
School B	179
School C	264
School D	277
School E	82
Total (N=)	984

Unfortunately, the researcher did not obtain enough responses from the initial sample of Grade 9 learners of these five schools, therefore an amendment to the initial research process was requested from HREC to enlarge the study population and to again recruit.

4.3.1.2 First amendment to enlarge study population

The researcher requested approval for a larger study population, resulting in the inclusion of Grade 8, 10 and 11 learners from the five participating schools. This amendment was approved by HREC (see Addendum K). Hereafter the researcher requested adapted permission from the Department of Education and school principals. Four of the five schools gave permission to include their Grade 8, 10 and 11 learners [**N=2548**] (see Table 4.3 below). The researcher informed the Faculty of Education of the NWU of the above amendment and the research study title changed. From there the researcher followed the same process at the schools as during the initial phase.

Table 4.3:

Participant Recruitment: Inclusion of Grade 8, 10 and 11 learners

	Gr 8 learners	Grade 10 learners	Grade 11 learners	Total
School A	220	163	141	524
School B	177	153	157	487
School C	277	271	204	752
School D	263	280	242	785
Total (N=)				2548

The final study population were established after the above two processes (Table 4.2 and 4.3). The study population totalled to **N= 3532 (984+2548)**.

4.3.1.3 Second amendment

Regrettably, the researcher still had not obtained enough responses after the first round of data collection, possibly because the online survey entailed using private data and learners could possibly have been hesitant to use their own data. A second amendment was subsequently requested from HREC (see Addendum K) to adapt the data collection procedures to give all volunteer participants a fair chance to participate. The researcher requested an amendment from HREC to also include a hard copy option as a data collection procedure. The researcher contacted the principals again and requested them to hand out questionnaires in private, unmarked, sealed envelopes to the learners who had already submitted parent permission and adolescent consent. The envelope contained a reminder (see Addendum L) about the study to parents and their children, including the online link, as well as a hard copy of the survey to be filled in anonymously and in the privacy of their homes. Thereafter the learners could mail the sealed envelope back into a box marked NWU, in the Life Orientation teacher's class to ensure privacy. The hard copy option considered learners who do not have adequate access to WiFi, as data is expensive. This process ensured that everyone had an equal chance to participate.

4.3.1.4 Sample group

The final sample group comprised of 187 (n) voluntary participants. It was an availability sample and not representative of all the Grade 8, 9, 10 and 11 learners in the Matlosana municipal district.

4.3.2 Data collection

The data collected during this study were initially gathered by means of an electronic web-based survey (see Addendum A), but later on also by means of a hard copy survey (see Addendum B). Google Forms was used to conduct the electronic survey. It took participants approximately 20 minutes to complete the survey. They filled in the survey in the comfort of their own homes. The electronic/hard copy survey provided participants with the opportunity to answer the questions either in English or in Afrikaans. The time frame for the data collection was cross-sectional, which means that the researcher could collect data at one specific point in time, although this process took a few days or even weeks (Fraenkel et al., 2012). As mentioned in the introduction of the study, the online and hard copy surveys included three questionnaires. Each of these instruments are discussed next, referring to normal application.

4.3.2.1 Adapted Daphne Cyberbullying Questionnaire (DCBQ) (Smith, 2014)

The researcher had permission (see Addendum M) from the original inventor, Prof P.K. Smith (Goldsmith, University of London, U.K.), to adapt the above questionnaire so that it would be suitable for use within the South African context. Pilot testing was conducted prior to finalisation of this questionnaire.

This questionnaire consisted of five sub-sections. The first section asked for demographic information (see questions 1–4) about the participants: gender, age, grade and disability. One sensitive demographic question was added to the original questionnaire, namely sexual orientation. As mentioned in Chapter 2 (2.2.7.2.2), various studies indicate a much higher prevalence of CB among adolescents who identify themselves as being LGBTQ than among peers who identified themselves as heterosexual. Therefore, inclusion of this question was justifiable since these minority groups are at risk of being cyberbullied. The second section involves how participants feel about their schools (see questions 5–12). The researcher added questions about bullying policy awareness to this section (see questions 13–14). The third section asked participants about their electronics use (see questions 15–18). The researcher added questions about parental supervision (see question 19). The fourth

section asked participants about their traditional bullying and CB experiences (see questions 20–25). The last section asked questions only applicable to CB (see questions 25–32). The validity and reliability of the scale are discussed in 4.4.1.

4.3.2.2 Patient Health Questionnaire (PHQ-9) (Kroenke, Spitzer & Williams, 2001).

The PHQ-9 (see Addendum A, section 2) is a 9-item self-report depression scale used to screen for symptoms of unipolar depressive disorder which could mean certain participants are at risk and we have an ethical obligation to contain risk. Depression is defined and categorised according to DSM-V criteria (APA, 2013), and the scale is unidimensional to indicate the degree of the experience of unipolar depression. According to Kroenke et al. (2001) there are five different degrees of depression: minimal (0–4), mild (5–9), moderate (10–14), moderately severe (15–19) and severe (20–27). The scale is scored on a four-point frequency response format, with answer options ranging between 0 and 3 being: *not at all (0)*, *several days (1)*, *more than half the days (2)* and *nearly every day (3)*. The validity and reliability of the scale are discussed in 4.4.2.

4.3.2.3 Mental Health Continuum-short form (MHC-SF, Keyes, 2002)

The MHC-SF (see Addendum A, section 3) is a 14-item scale designed to measure positive mental health on a continuum of categories of languishing, moderate mental health and flourishing. It consists of three subscales, namely Emotional well-being (EWB) (items 1–3); Social well-being (SWB) (items 4–8); and Psychological well-being (PWB) (items 9–14). It uses a response format of a 6-point frequency scale, with answer options ranging between 0–5 being *never (0)*, *once or twice (1)*, *about once a week (2)*, *2 or 3 times a week (3)*, *almost every day (4)* and *every day (5)*.

EWB indicates if a person is happy and satisfied with life (see 3.2.2.1.1). PWB reflects how well a person is functioning psychologically. SWB is the assessment of one's status and functioning within society (see 3.2.2.1.2). The MWB of a person can be either flourishing, languishing or moderate (see 3.2.2.1). For a person to be diagnosed with *flourishing* MWB, he/she must have marked at least one of the three EWB questions and at least six of the eleven remaining questions (SWB and PWB) as “every day” or “almost every day”. For a person to be diagnosed with *languishing* MWB he/she must have marked at least one of the three EWB questions and at least six of the eleven remaining questions (SWB and PWB) as “never” or “once or twice”. Persons who are neither flourishing nor languishing are

diagnosed with *moderate* MWB (Keyes, 2009). The validity and reliability of the scale are discussed in 4.4.3.

4.3.2.4 *Cross-referencing of research aims and items on survey*

The variables that were compared to one another are the constructs of the DCBQ as well as the constructs of the two standardised questionnaires (MHC-SF and PHQ-9). Demographic constructs (gender, age, grade, disability and sexual orientation) were included in the DCBQ questionnaire.

The cross-referencing of the research aims (see 1.5) and items on the survey (see Addendum A) is illustrated in Table 4.4.

Table 4.4:

Cross-referencing: Research Aims and Items on Electronic Survey

Number	Research aims	Item/s on survey
1.5.i	How adolescents in the Matlosana municipal area experience their school environment	Section 1: Questions 5–14
1.5 ii	The nature of electronics use among adolescents (1.5 i)	Section 1: Questions 15–19
1.5 iii	The prevalence of traditional bullying and CB among adolescents (1.6.1)	Section 1: Questions 20 and 23
1.5 iv	Whether a relationship exists between CB and traditional bullying (1.6.2)	Section 1: Questions 20 and 23
1.5 v	The nature of CB among adolescents (1.6.3)	Section 1: Questions 21–22, 24–33
1.5 vi	Whether there are differences in gender, age, grade, disability, sexual orientation with regard to the prevalence of CB, focusing on both the victim and the bully (1.6.4)	Section 1: Questions 1, 2.1, 2.2,3, 4 Section 1: Questions 20 and 23 (columns A and B)
1.5 vii	Whether a relationship exists between CB and MDD, focusing on both the victim and the bully (1.6.7.)	Section 1: Questions 20 and 23 (columns A and B) Section 2: Questions 1–11
1.5 viii	Whether a relationship exists between CB and aspects of MWB, focusing on both the victim and the bully (1.6.8)	Section 1: Questions 20 and 23 (columns A and B) Section 3: Questions 1–14

4.3.3 Data analysis

The Statistical Consultation Services of the North-West University assisted with the capturing and analysis of data. They used Statistical Analysis System (SAS) software. Descriptive statistical analysis was used to analyse the data. Maree (2016) describes it as a method that is used to organise, synopsis and present data in such a manner that understanding of the properties of the data are enhanced. Descriptive statistics consist of measures of central tendency, variability and associations, presented either numerically or in graphs (Maree, 2016).

As a result of the fact that only five schools per stratum were randomly selected and representation could not be guaranteed, as well as the fact that learners were purposively chosen according to having internet access and cell phones, differences between group means were interpreted according to Cohen's effect sizes, d . Effect sizes indicate practical significance, which is the extent to which a difference is large enough to have an effect in practice (Steyn, 2009). Effect sizes were interpreted according to Social Science guidelines (Ellis & Steyn, 2003) so that 0.0–0.4 were seen as small effect sizes and insignificant. These results were not presented. An effect size of 0.4–0.64 was seen as a medium effect and 0.65 – ≥ 0.8 tended towards a large effect that is practically meaningful. No inferential statistics were used to interpret results, although p -values (statistically significant at 0.05 level) were reported for completeness sake since random sampling was used. In case of two-way tables, phi-coefficients were used to interpret the practical relationship between variables (Cohen, 1988). Phi-coefficient interpretation: 0.1 is a small relationship, 0.3 is a medium relationship and 0.5 and above is a large relationship that is practically meaningful. The results of the data analysis are reported in Chapter 5.

4.4 VALIDITY AND RELIABILITY

To ensure rigour (thorough) research, the researcher must make an effort to guarantee quality research. In quantitative research, rigour is achieved by the validity and reliability of the measuring instruments (Heale & Twycross, 2015). If a measuring instrument measures what it is expected to measure it is seen as a *valid* instrument, and if two different researchers can produce the same results with the same instrument and sample group at a different time, the instrument is seen as *reliable* (Maree, 2016, Kivunja & Kuyini, 2017). The measuring instruments that were used yielded the following validity and reliability indices:

4.4.1 Daphne Cyberbullying Questionnaire (DCBQ)

Although not validated in the South African context, the DCBQ was adjusted and reliability indices were calculated. Good reliability and validity indices were found in a European project on bullying and CB granted by Daphne II programme (Brighi, Guarini, & Genta, 2009). In this study the Cronbach alphas were as follows: general school experience (Questions 5–10) (n=174) **0.75** (good) and experience of peers at school (Questions 11–12) (n=175) **0.60** (fair).

4.4.2 Patient Health Questionnaire-9 (PHH-9)

Kroenke et al. (2001) found the PHQ to be reliable and reported a Cronbach alpha of .89 as well as satisfactory criterion-related and construct validity. Temane, Khumalo, and Wissing (2014) yielded a Cronbach alpha of 0.81 (n=459) in their South African study. In this study (n=139) the Cronbach alpha was very good, namely **0.86**.

4.4.3 Mental Health Continuum-Short Form (MHQ-SF)

The MHC-SF has shown notable internal consistency (> 0.80) and discriminant validity (Keyes, 2002). It was also piloted by adolescents (ages 12–18) and adults in the U.S.A, the Netherlands, and South Africa (Keyes, 2009). The test-retest reliability of the MHC-SF in the same three countries over three successive three-month periods averaged 0.68 and 0.65 for the nine-month test-retest (Keyes, 2009). Keyes et al. (2008) report a Cronbach alpha of 0.74 among a Setswana-speaking sample. In an English speaking sample, the Cronbach alpha in the South African study of Temane, Khumalo and Wissing (2014) was 0.84 (n = 459). The MHC-SF has thus been found to be reliable and valid in a South African context. In this study the Cronbach alphas were very good: EWB (n=121) **0.81**; SWB (n=120) **0.82** and PWB (n=114) **0.87**.

4.5 ETHICS CONSIDERATIONS

The proposal of this study was approved by the scientific committee of COMBER in the Faculty of Education, where after ethics approval was obtained from the Health Research Ethics Committee (HREC) of the Faculty of Health Sciences with ethics approval number **NWU-00009-17-S1**.

The following ethics guidelines were adhered to as stated in Bless et al. (2013), the Health Professions Act 56 of 1974 (HPCSA, 1974) and the National Health Act (2003): avoidance of harm; beneficence and non-maleficence; voluntary participation and

discontinuance; ministerial consent, informed consent and adolescent ascent; privacy, anonymity and confidentiality; remuneration and management, storage and destruction of data.

4.5.1 Avoidance of harm / non-maleficence

Researchers should ensure that they avoid harm and foresee any possible psychological harm their research might bring to their participants (Babbie, 2008). *Non-maleficence*: risks and harms of research to participants must be minimised and everyone is entitled to an environment that is not harmful to health or well-being (Health Professions Act, 1974). It was anticipated that some participants might experience discomfort while completing the survey, maybe realising that they do feel depressed, even suicidal, or that their well-being is at a languishing level as a result of being a victim/bully of CB. It could also be that they are not depressed or suicidal, but in despair because of CB. Lastly, just by completing this survey, participants may have expected assistance from a counsellor or psychologist. Therefore, the principles of beneficence and non-maleficence were adhered to in this study.

4.5.2 Beneficence

These principles are found in the Health Professions Act, 1974 and the RSA Constitution, 1996 and can be explained as follows:

Beneficence: the benefits of health research must outweigh the risks to the research participants and everyone has the right to access health care. This study was a low-risk study with no direct benefit, yet the potential indirect benefits of generating new knowledge in this field of study outweighed the risks (see 1.10.2).

Since beneficence and non-maleficence were at stake, any foreseeable risk was restricted to the minimum, any permanent damage was avoided as far as possible and appropriate precautions and safety measures were in place (see Table 4.5 for risks and precautions).

Table 4.5:
Risks and Precautions

Mild risks	Precautions
Physical harm (Physical discomfort)	The participants completed the online/hard copy survey in the comfort of his/her own home and were able to rest in between answering questions.
Psychological (Coercion)	It was made clear to the Life Orientation teachers during training for the consent process and to parents at the parent information meeting that coercion was not allowed. Participation was voluntarily and the learners were free to withdraw at any time.
Psychological (Boredom)	Only the most essential questions were selected to keep the online/hard copy survey as short as possible.
Psychological (Inconvenience)	Participants completed the survey in the comfort of their own homes.
Psychological harm (Emotional distress, self-disclosure, embarrassment, anxiety, fear, sadness, anger, emotional trauma)	All responses were anonymous and confidential. Referral and emergency contact details were available at the end of the electronic/hard copy survey. The participants were able to seek psychological help by providing their cell phone numbers at the end of the electronic/hard copy survey. The study supervisor contacted these learners and referred them either to one of the registered counsellors in training (NWU, Department of Educational Psychology), or to a registered counsellor or psychologist, depending on the learner's specific need and financial situation.

4.5.3 Voluntary participation and discontinuance

Children are a vulnerable population; therefore, they may never be forced to partake in research and their best interest is paramount in all cases (Children's Act 38, 2005). When including minors, the problem that is investigated should be of relevance to them (National Health Act, 2003). Participants must have a clear understanding that participation is voluntary and of their right to decline participation or to discontinue partaking at any time (Fraenkel et al., 2012). The informed consent form was clear that participation in this study was voluntary

and children were free to withdraw from the study at any time without suffering negative consequences.

4.5.4 Ministerial consent, informed consent and adolescent assent

The National Health Act (2003) requires the Minister of Health to consent to “non-therapeutic” health research with minors. Non-therapeutic research means that the research might not hold direct benefit for the participants, but generalisable knowledge could be produced. Since this study focused on adolescents (children under 18 years) with no direct benefit, the researcher had to apply for ministerial consent to conduct this study, and it was granted (see Addendum E). According to the National Health Act (2003), when minors (children under 18 years) are involved as research participants the parents must give permission in order to protect them from harm and the child assents. Participants and their parents were fully informed about the nature of the research, firstly during a parent meeting and secondly by means of an information sheet included in the informed consent form handed out by the mediators. They were free to ask as many questions as they liked before signing the consent form. Because the prospective participants in this study were younger than 18 years, but older than 12 years, their parents/caretakers had to sign permission (see Addendum H) and the adolescents signed adolescent assent (see Addendum I) (National Health Act, 2003).

4.5.5 Privacy, anonymity and confidentiality

De Vos, Strydom and Fouché (2011) state that it is of utmost importance that the researcher protects the privacy and the identity of the participants. All efforts were made to protect participants’ privacy, therefore the data collection (both online and hard copy option) was anonymous, and it took place in the convenience of the participants’ homes. With the hard copy option, precaution with regard to privacy were managed, since the hard copy was in an anonymous and sealed envelope. The learners received the copy from their Life Orientation teachers in private and they could drop the completed form in a sealed box at school. All data were handled anonymously and in confidentiality throughout, as no names of schools that were included in neither the sample, nor when the final data were reported. The findings were reported as group data rather than individual voices. The responses were reported as the voices of Grade 8–11 learners in the Matlosana and municipal area.

Usually the researcher should not be able to identify the participants after the data collection, but because depression and being bullied can pose a possible suicide risk, the

presence of these factors poses limitations to confidentiality by law (Health Professions Act, 1974). Participants who sought psychological help filled in their cell phone numbers at the end of the electronic survey and the study supervisor contacted them and referred them to either to one of the registered counsellors in training (NWU, Department of Educational Psychology) or to a registered counsellor or psychologist, depending on their specific need and financial situation.

4.5.6 Freedom from coercion and no remuneration

The National Health Act (2003) states that consent to participate should be given without any unjustifiable influence from the researcher. A mediator was used to inform them of the study and to obtain assent and parent permission. Also, in this study, the learners were not paid for participation in order to protect them from exploitation, commodification and coercion, there was a lucky draw. Three lucky winners will receive PNA vouchers to the value of R250.00 in 2020 at the beginning of the school year.

4.5.7 Management, storage and destruction of data

4.5.7.1 Management and storage of data

To ensure confidentiality all data were managed very carefully, and only the following persons had access to the quantitative data: Ms E Mong (student), Drs D Kirsten (study supervisor), A de Wet (assistant study supervisor) and Dr W Breytenbach (NWU statistical services). The consent forms and hard copy surveys are stored safely at the facility of the Educational Psychology Department (filing cabinets with locks). Electronic documents (analysed data) were encrypted with passwords and stored on Dr Breytenbach's computer, which is password protected.

4.5.7.1.1 Hard copies of data

The consent forms and the hard copy filled-in questionnaires are stored at the Educational Psychology Department (filing cabinets with locks) at the Faculty of Education Sciences, NWU Potchefstroom campus for five years. The MEd student, Ms E Mong and the two study leaders, Drs D Kirsten and A de Wet have access to the stored data. The assistant of the Educational Psychology Department has access to the cabinet as well, but only when accompanied by one of the supervisors.

It was made clear to the Life Orientation teachers (mediators) that they should have no versions of the consent forms or the hard copy surveys in their possession (either

photocopied, scanned, picture format). All the forms were handed back to the researcher, even the incomplete forms.

4.5.7.1.2 Electronic versions of data

Dr Breytenbach of the Statistical Consultation Services of the NWU stored the data on her computer, which is password protected. The MEd student and the study leaders received an Excel version of the data analysis. These documents were password encrypted and stored on their computers, which are password protected.

4.5.7.2 Destruction of data

The data, both hard and electronic copies, will be destroyed after five years. The hard copies will be shredded by the research supervisor and her assistant and the electronic data will be deleted from all computers by the researchers and Dr Breytenbach.

4.6 SUMMARY

This chapter delved into the research paradigm and assumptions that informed this survey research design. A breakdown of the research methods used to execute the research design was provided. The validity and reliability of the data collection methods were presented. Lastly, the ethical aspects that were carefully considered in this study were discussed. In Chapter 5 the results of the data analysis and interpretation are discussed.

CHAPTER FIVE

FINDINGS AND DISCUSSION

5.1 INTRODUCTION

In this chapter, the results of the data analysis are presented and interpreted in four sections. Firstly, demographic information of the sample group are presented. Secondly, statistics pertaining to the findings of CB and traditional bullying that were derived from the whole sample group (n=187) are outlined. This includes the findings of objectives 1.5 i – 1.5 iv: the school environment experience of participants, the nature of electronics use among adolescents, the prevalence of CB and traditional bullying and the relationship between CB and traditional bullying. Thirdly, the findings that focused only on CB involvement are set out. This includes the findings of objectives 1.5 v and 1.5 vi: the demographic differences with regard to CB and the nature of CB among adolescents. Lastly, the findings of objectives 1.5 vii and 1.5 viii follow: the effect of CB on the level of depression and the MWB of the CB involved group (both victims and bullies). An in-depth discussion follows each section.

5.2 DEMOGRAPHIC INFORMATION OF THE SAMPLE GROUP

In this section the distribution of participants (n = 187) in terms of gender, age, grade, disability and sexual orientation are presented (see Addendum A, questions 1–4). Figure 5.1 illustrates the gender distribution.

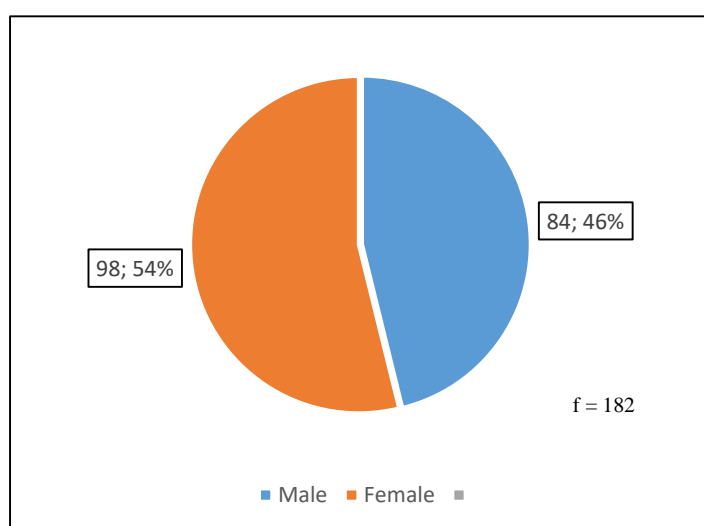


Figure 5.1: Gender distribution of participants

There were slightly more female participants (54%) than male participants (46%). Five participants did not disclose their gender. The age distribution of participants is illustrated in Figure 5.2.

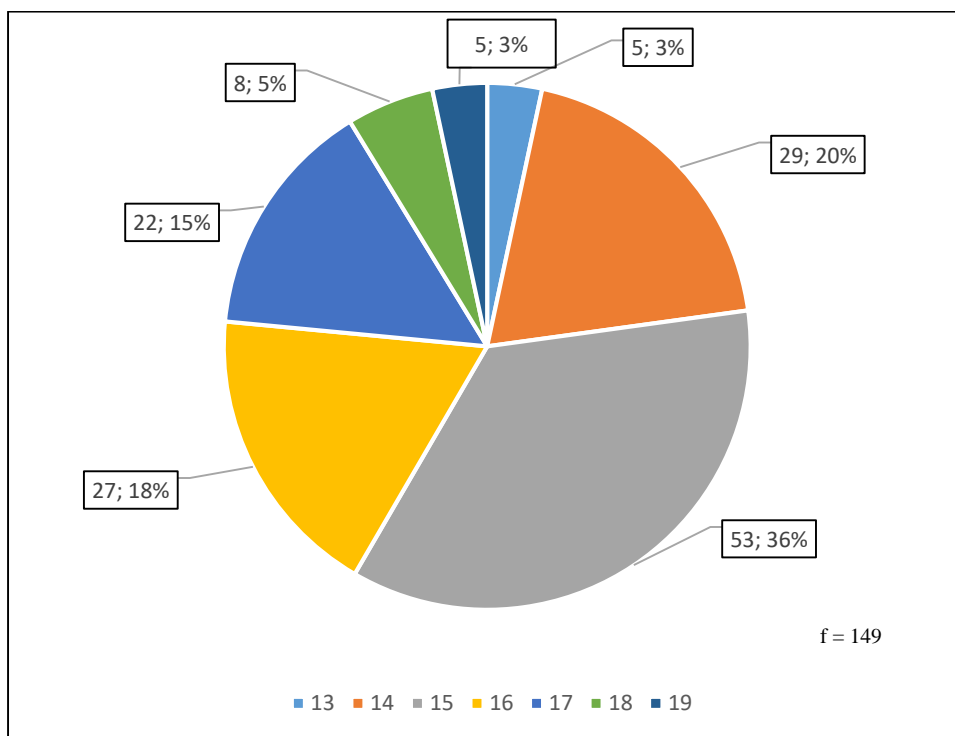


Figure 5.2: Age distribution of the participants

The majority of learners (36%) were 15 years old. The remaining 64% were distributed between 14 (20%), 16 (18%), 17 (15%), 18 (5%), 13 and 19 (both 3%) years old. Thirty-eight participants did not fill in their age. The grade distribution is illustrated in Figure 5.3.

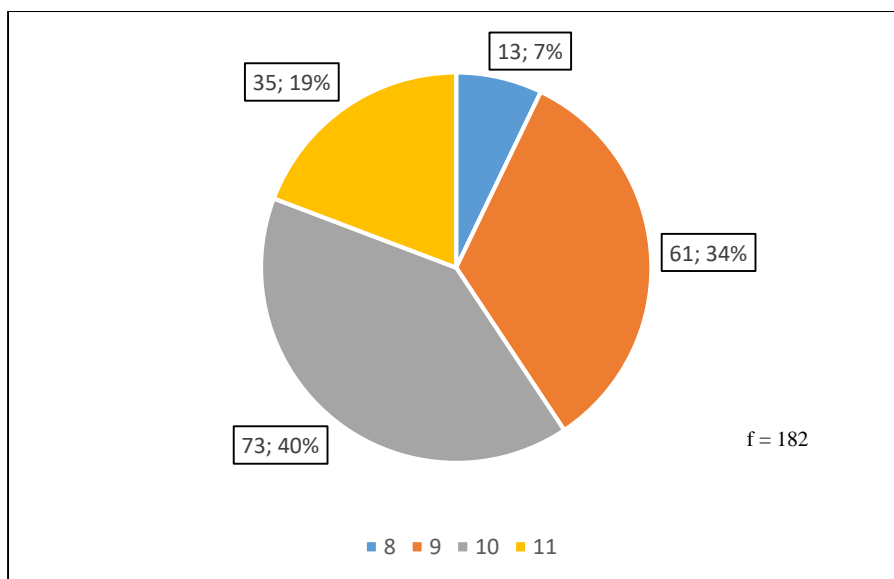


Figure 5.3: Grade distribution of the learners

The majority of the participants were in Grade 10 (40%) and Grade 9 (34%). The remaining were in Grade 11 (19%) and Grade 8 (7%). Five participants did not fill in their grade. The disability distribution is illustrated in Figure 5.4.

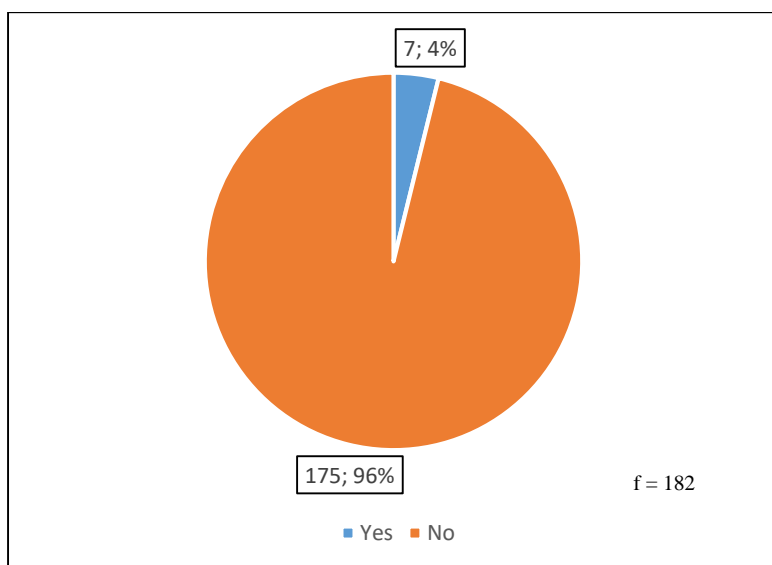


Figure 5.4: Disability distribution of the participants

Only 4% of the participants have a disability. Five participants did not indicate if they have a disability or not. Lastly, the distribution of sexual orientation is illustrated in Figure 5.5

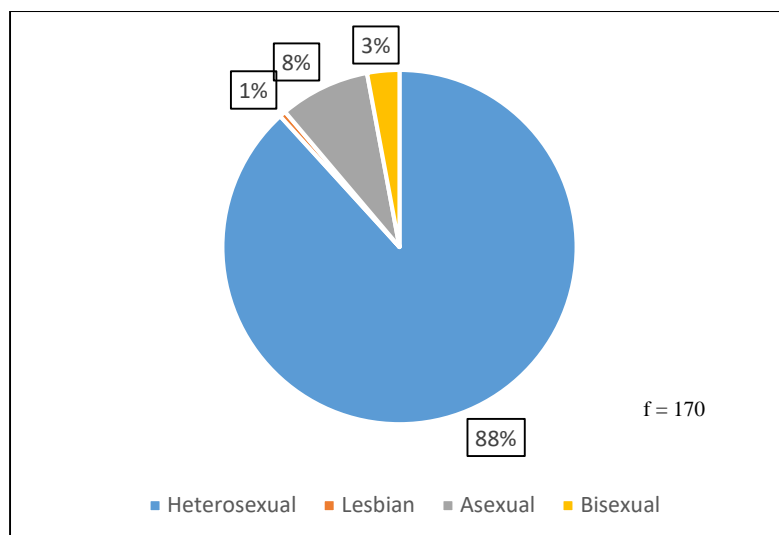


Figure 5.5: Sexual orientation distribution of participants

More than two thirds (88%) of the participants indicated that they are heterosexual. The remainder were distributed between asexual (8%), bisexual (3%), lesbian (1%) and gay (0%). Seventeen (n=17) participants did not declare their sexual orientation. The findings of traditional bullying and CB related to the whole sample group is presented next.

5.3 FINDINGS AND DISCUSSION OF CB AND TRADITIONAL BULLYING: THE WHOLE SAMPLE GROUP

In this section the findings of objectives 1.5 i – 1.5 iv are presented: the school environment experience of the participants, the nature of electronics use among the participants, the prevalence of traditional bullying and CB among the participants and the relationship between CB and traditional bullying.

5.3.1 Adolescents' experience of the school environment experience in the Matlosana municipal area (objective 1.5 i)

The aim of this section was to explore the participants' experience of their school environment in general and their bullying policy awareness.

The participants' school environment experience is presented first. Participants were asked how they generally feel about their school and their peers by means of a *4-point Likert scale* where 1 was *not at all*, 2 was *a little*, 3 was *average* and 4 was *a lot* (see Addendum A, questions 5–12).

Table 5.1:

School Environment Experience

Construct	N	Mean	Std Dev	Minimum	Maximum
General school experience (Questions 5–10)	174	18.88	3.64	8.00	24.00
Experience of peers at school (Questions 11–12)	175	6.50	1.25	3.00	8.00

This indicates that most of the participants said they experience their school as a happy, caring, safe and supportive school and that they have good trusting relationships with their teachers (mean=18.88). Also, most participants indicated that they have good relationships with other learners in their classes and at school (mean=6.50).

In the next sub-section participants were asked about their awareness of bullying policies at their school and they had to indicate if they are *aware*, or *not aware* or if they are *unsure*.

Table 5.2:

Bullying Policies

Are you aware of a bullying policy at your school? (Question 13)	f	%
Yes	80	44.20
No	55	30.39
I do not know	46	25.41
Total	181	100

6 Missing

If YES, does that policy include dealing with cyberbullying incidents?

Question 14)

Yes	52	30.95
No	26	15.48
I do not know	90	53.57
Total	168	100

19 Missing

More than half of the learners were either unaware (30,39%) or unsure (25,41%) of whether their schools have a bullying policy and less than a third (30,95%) said that their school's bullying policy includes dealing with CB. Thus, almost 70% of the learners are uninformed on CB policies or the policies do not exist. The next section presents the nature of electronics use among adolescents.

5.3.2 The nature of electronics use among adolescents (objective 1.5 ii)

The aim of this section was to explore participants' use of technology. Participants were probed about their mobile phone and internet access, time spent per day using electronic devices and parental supervision (see Addendum A, questions 15–19). Participant's mobile phone and internet access are presented first.

5.3.2.1 Mobile phone and internet access

Participants were firstly asked if they own a personal mobile phone and they had to indicate *yes* or *no*.

Table 5.3:

Owning a Personal Mobile Phone

Do you have a cell phone?		
(Question 15)	f	%
Yes	177	97.25
No	5	2.75
Total	182	100

5 Missing

The majority of the sample group owned a mobile phone (97,25%), consequently providing them with opportunities to bully others or to be bullied. The next question was asked to determine if adolescents have access to the internet at home. They could have answered *no* or choose between 3 *other options*.

Table 5.4:

Computers Linked to the Internet Inside the Learner's Home

Are there any computers linked to the internet at your house? (Question 16)	f	%
No, we don't have a computer linked to the internet in our home	77	41.18
Yes, in my room	51	27.27
Yes, in the living room	23	12.30
Yes, elsewhere	54	28.88
Total	205	

*The learners could choose more than one option, therefore f is more than 187 and no % is indicated

Some learners had access to the internet at their home, either in their own room (27,27%) or in the living room (12,30%) and 28,88% had access elsewhere. A total of 41,18% did not have internet access at home. The following question looked into adolescents' internet access outside their home as illustrated in Table 5.5. They could have answered *yes* or *no*.

Table 5.5:

Access to the Internet Outside the Learner's Home

Do you have access to the internet outside your house? (Question 17)	f	%
Yes	117	64.29
No	65	35.71
Total	182	100

5 Missing

Almost two thirds (64,29%) of learners had access to the internet outside their home, meaning that CB is easily extended to outside home internet access.

5.3.2.2 *Time spent per day using electronic devices*

The next question was asked to establish how much time adolescents spend online. They had *four options* to choose from.

Table 5.6:

Time Spent Per Day Using Electronic Devices

How much time per day do you use electronic appliances (e.g. cell phone and the internet?) (Question 18)	f	%
Less than one hour per day	15	8.29
One to two hours per day	36	19.89
Two to three hours per day	37	20.44
More than three hours per day	93	51.38
Total	181	100

6 Missing

More than half of the sample group (51,38%) spent more than three hours per day on electronic devices. This implies that at least half of adolescents in this study spent considerable amount of time with technology that may put them at risk for bullying. The next section probed the participants about parental supervision while online.

5.3.2.3 *Parental supervision*

The questions aimed to determine whether parents are *aware* of adolescents' online activities, provides *rules* for online activity and have *conversations* with adolescents about online activity.

Table 5.7:

Parental Supervision

Are your parents aware of what you do on the internet?
(Question 19.1)

Yes	123	67.96
No	58	32.04
Total	181	100

6 Missing

**Have your parents given you rules about accessing the internet
e.g. times that you can access the internet and websites that you can visit?**

(Question 19.2)

Yes	82	45.30
No	99	54.70
Total	181	100

6 Missing

**Have your parents/caregivers ever spoken to you about how to protect yourself
when you are online?**

(Question 19.3)

Yes	116	64.44
No	64	35.56
Total	180	100

7 Missing

Do you have an open communication relationship with your parents/care givers?

(Question 19.4)

Yes	134	75.28
No	27	15.17
I do not know	17	9.55
Total	178	100

9 Missing

The majority of the participants said their parents are aware of their internet use (67,96%) and have talked to them about protecting themselves on the internet (64,44%). Yet only 45,30% has discussed rules about internet use, essentially leaving adolescents to make their own rules. At least, most (75,28%) of the learners have a positive relationship with their parents, which could provide them with adult input that would influence their online behaviour. In the next section the prevalence of traditional bullying and CB among adolescents is presented.

5.3.3 The prevalence of traditional bullying and cyberbullying among adolescents (objective 1.5 iii)

The aim of this section was to explore participants' experience of traditional bullying and CB (see Addendum A, question 20 and 23). The prevalence of CB victims is presented first, thereafter the prevalence of cyberbullies. An in-depth discussion is provided at the end of the section

5.3.3.1.1 Victim prevalence

Participants were asked if they had been victims of mobile CB, internet CB, direct traditional bullying or indirect traditional bullying over the two months preceding data collection. They had to choose between *yes* or *no* for each of the four questions (see Addendum A, Question 20.1–20.4).

Table 5.8:

Victim Prevalence

	f	%
Question 20.1		
Mobile CB		
Yes	25	14.53
No	147	85.47
Total		100
15 Missing		
Question 20.2		
Internet CB		
Yes	11	6.08
No	170	93.92
Total		100
5 Missing		
Question 20.3		
Direct traditional bullying		
Yes	24	13.19
No	158	86.81
Total		100
5 Missing		
Question 20.4		
Indirect traditional bullying		
Yes	31	17.03
No	151	82.97
Total		100

5 Missing

The majority of the participants said they had not been bullied (not CB or traditional bullying), while a small group experienced either internet CB (6,08%), direct traditional bullying (13,19%), mobile CB (14,53%) or indirect traditional bullying (17,03%). It seems that indirect traditional bullying occurs just a bit more than mobile CB. The data of Tables 5.8 were condensed into two groups and are presented next. These groups were created with the intention to 1) reduce data, 2) determine the relationship between CB and traditional bullying, and 3) compare the MWB and level of depression of bullies and victims of bullying.

5.3.3.1.2 *Victim prevalence: Groups*

The group called *CB victims* represents the participants who indicated that they had experienced either internet or mobile bullying or both. The same participant could thus have marked both internet and mobile bullying, but the participant was only counted once. The group called *traditional bullying victims* represents the participants who indicated that they had experienced either direct or indirect bullying or both. The same participant could thus have marked both direct and indirect bullying, but the participant was only counted once.

Table 5.9:

Victim Prevalence - Groups

	f	%
CB – victims		
Yes	31	20.95
No	117	79.05
Total	148	100
39 Missing		
Traditional bullying – victims		
Yes	44	27.33
No	117	72.67
Total	161	100

26 Missing

It appears that there are almost equal numbers of CB (20,95%) and traditional bullying victims, with traditional bullying being somewhat more prevalent (27,33%). One out of five of the participants had been cyberbullied and one to two out of five had been bullied traditionally. The prevalence of cyberbullies are presented next.

5.3.3.1.3 *Bully prevalence*

Participants were asked if they had bullied someone else over the two months preceding the data collection period. They had to indicate if they had bullied someone via a mobile phone and or the internet (CB) or directly or indirectly (traditional bullying). They had to choose between *yes* or *no* and they could have marked more than one option (see Addendum A, Question 23).

Table 5.10:

Bully Prevalence

	f	%
Question 23.1		
Mobile CB		
Yes	7	3.87
No	174	96.13
Total	181	100
6 Missing		
Question 23.2		
Internet CB		
Yes	3	1.66
No	178	98.34
Total	181	100
6 Missing		
Question 23.3		
Direct traditional bullying		
Yes	10	5.75
No	164	94.25
Total	174	100
13 Missing		
Question 23.4		
Indirect traditional bullying		
Yes	10	5.75
No	164	94.25
Total	174	100

13 Missing

Very few learners reported that they has bullied someone else, as 3,87% reported they had bullied someone via a mobile device and 1,66% via the internet over the last two months. It seems as if learners admitted to being involved equally in directly and indirectly bullying someone in the two months preceding data collection, albeit 5,75%. The data of Tables 5.10 were condensed into two groups (see Table 5.11 below). These groups were created for the same reasons that the victim groups were created.

5.3.3.1.4 Bully prevalence: Groups

The group called *CB bullies* represents the participants who indicated that they had bullied someone else either via the internet a mobile phone or both. The same participant could thus have marked both internet and mobile bullying, but the participant was only counted once. The group called *traditional bullying bullies* represents the participants who indicated that they had bullied someone else either directly or indirectly or both. The same participant could thus have marked both direct and indirect bullying, but the participant was only counted once.

Table 5.11:

Bully Prevalence – Groups

	f	%
<i>CB bullies</i>		
Yes	10	6.13
No	153	93.87
Total	163	100
24 Missing		
<i>Traditional bullying bullies</i>		
Yes	17	10
No	153	90
Total	170	100
17 Missing		

The perpetrators of bullying were less prevalent, with traditional bullying (10%) once again somewhat more prevalent than CB (6,13%). In this next section the relationship between CB and traditional bullying is explored.

5.3.4 Relationship between CB and traditional bullying (objective 1.5 iv)

The aim of this section was to explore possible relationships between the prevalence of CB and traditional bullying. Thus, to explore if CB victims were victims of traditional bullying as well, and if CB bullies bullied others traditionally as well. Phi-coefficients were used to interpret the partial relationship between variables (CB and traditional bullying). The relationship between CB victims and traditional bullying victims was insignificant, since the Phi-coefficient was 0.2174. It is therefore not discussed further. On the other hand, the Phi-coefficient for the relationship between CB bullies and traditional bullying-bullies was 0.461, indicating a medium relationship (see Table 5.12 below).

Table 5.12:

Relationship between CB and traditional bullying (Bullies)

CB bullies	Traditional bullying bullies		Total
	1	2	
1	4	4	8
	50.00%	50.00%	
2	6	153	159
	3.77%	96.23%	
Total	10	157	167

1=yes 2=no
20 Missing

Table 5.12 indicates that 50,00% of the CB bullies bullied someone traditionally as well. Conversely, 3,77% did not CB others, but only bullied others traditionally.

5.3.5 Discussion

It is comforting that the participants' school experience in this study was relatively positive, despite the fact that bullying did occur among these adolescents. According to

Hinduja and Patchin (2018), victims and bullies of CB in the USA perceive their school climate as poor, whereas learners who are not involved in CB perceive it much better. CB behaviour seems to increase as learners transition from primary to secondary school (Cross et al, 2015). The literature indicates that the following factors are related to CB and the secondary school transition: increased access to electronic devices, making new friends and being part of new groups, adjusting to their school, feeling isolated, unsafe and disconnected at school, the teacher's approach towards bullying and lack of school community. It is clear that the climate of a school might be a significant factor in relation to CB in the South African context and that it should be explored further in the future. Nonetheless, school relationships as a protective factor for victims are discussed under recommendations.

The bullying policy awareness of the participants seem to be poorer than in another South African study conducted by Batterbee (2014). In this study 69,05% and in Batterbee's study 42,7% learners were unaware of the availability of policies dealing with CB at school. According to Batterbee (2014), Code of Conduct documents at schools seem to be lacking some aspects regarding CB and the perceptions of learners and educators have not always been part of the formulation process.

From the findings regarding adolescents' mobile and internet access, it is clear that most of the participants in this study do have access to the internet, either at their own home or elsewhere. This finding is in keeping with international trends. According to Hinduja and Patchin (2018), 95% of adolescents in the USA are online and an immense quantity of them can access the internet on their own mobile device. In a study conducted by Burton et al., (2016) 70,4% of their participants (children and adolescents) had access to the internet. It is believed that once internet access increases, children's and adolescents' safety and well-being are more at risk (Livingstone, Stoilova & Kelly, 2016). The majority of the adolescents in this study spend quite some time online, again in keeping with international trends. In a study conducted by Anderson and Jiang (2018), 45% of their respondents said that they are constantly online. Costello and Ramo (2017) report that 92% of the adolescents in their study said they go online daily and 24% said they are regularly online. Burton et al. (2016) propose some reasons as to why children use the internet excessively – an important one is that one in two (49%) of the participants want to make sure they are up to date with the latest, therefore they constantly check their device – fear of losing out (FOMO). This constant online activity may put adolescents at risk of CB engagement to some extent. Anderson and Jiang (2018) report that adolescents who were bullied online were more active online (67%) than those

who had not been bullied (53%). It seems to hold true for this present study as well. In this study the relationship between constant online activity and CB was not explored, but it is clearly a topic for future research.

In relation to parental supervision, it seems as if the majority of parents in this study would be able to assist their teen with CB, since they have a positive relationship. Our findings are somewhat contradictory to that of a study conducted in Italy by Baldry, Sorrentino and Farrington (2019), where 50% of the adolescents reported that their parents are not informed about their online activities, nor do they have access to it. Adolescents who have experienced CB reported much poorer parental supervision than those not exposed. According to Bergmann and Baier (2018), a positive parent-child relationship has a great influence on CB – parents can influence their children by teaching them empathy and about violent media. Ang (2015) states that parents often lack knowledge regarding rapid technology changes and therefore struggle to educate their children with regard to online use and protection. Cyberbullies, especially, have weak bonds with their parents, might experience harsh discipline and their internet behaviour is often not monitored (Nixon, 2014). The relationship between parental supervision and CB was not explored in this study, but it is clear from the available literature that it is a theme for future research.

This study's findings of traditional bullying victims (27,33%) being somewhat more prevalent than CB victims (20,95%) is in keeping with Bottino, Bottino, Regina, Correia and Ribeiro (2015), who found that CB might occur at a lower prevalence than traditional bullying, but it still affects 10–20% of adolescents. Nonetheless, the prevalence of CB among adolescents in the present study is more or less comparable with results reported in previous literature. In a recent study conducted globally, a quarter of South African parents indicated that their children have experienced CB (Newall, 2018). A study conducted in Boston also indicated a 21% CB victimisation prevalence (Schneider, O'Donnell & Smith, 2015). A Canadian study had a 19,8% prevalence of CB victims (Kim, Kimber, Boyle & Georgiades, 2019). However, some studies have indicated a much higher prevalence. In China, the researchers, Rao et al. (2019) reported that 45% of their respondents have experienced CB. In a sample of Greek secondary school learners, a high prevalence of 62% was revealed (Gkiomisi, Gkrizioti, Gkiomisi, Anastasilakis and Kardaras, 2017). In a study conducted by Balakrishnan (2018), the CB victims (18,6%) were 10% more than the CB bullies (8%) – concurrent with this study of 20,95% victims and 6,13% bullies. It seems as if bullies do not

come forward easily. This leaves us with the question, what can be done so that the bully can also be identified and helped?

The moderate relationship between CB bullies and traditional bullying bullies found in this study is similar to the findings of other studies indicating a definite overlap between traditional bullying and CB (Smith, 2019). Livingstone et al. (2016) found that traditional bullying might still be a bigger problem than CB, but that it seems if traditional bullying bullies transfer the bullying to the online world. Even so, CB could be seen as a new form of peer aggression with its own unique characteristics. In the next section the results that obtained from the CB involved groups are presented.

5.4 RESULTS AND DISCUSSION OF CYBERBULLYING: FINDINGS THAT WERE DERIVED FROM THE CYBERBULLYING INVOLVED GROUPS

In this section the findings in answer to objectives 1.5 v and 1.5 vi are presented: demographic differences with regard to CB and the nature of CB. The CB involved groups (see Tables 5.9 and 5.11) were used for these findings. An in-depth discussion follows at the end of the section.

5.4.1 Demographic differences with regard to CB (objective 1.5 v)

The aim of this section was to determine if there are any demographic differences (gender, age, grade, disabilities and sexual orientation) with regard to CB experience.

The group with disabilities was too small (4%) (see Figure 5.4) to provide statistically meaningful data. Thus, the disability differences with regard to CB were not explored any further. The relationships between gender, age, grade and sexual orientation differences and CB were explored, but the Phi-coefficient scores of these findings were all below 0.3, thus statistically insignificant.

5.4.2 The nature of CB among adolescents in the Matlosana municipal area (objective vi)

The aim of this section was to explore how participants experienced CB (see Addendum A, questions 21, 22, 24–33).

5.4.2.1 *How often did the bullying occur (for the victim)?*

In this section the victims had to indicate how often the bullying occurred. The participants reported as follows:

Bullied by means of the cell phone: 36% indicated that it happened only once or twice ever; 9% that it happened 2 or 3 times per month and 18% that it happened once per week. None reported that it occurred several times a week or more.

Bullying by means of the internet: 64% indicated that it happened only once or twice ever; 16% that it happened 2 or 3 times per month and 4% that it happened once per week. Similar than with internet victimisation, none reported that it occurred several times a week or more.

Thus, it seems if majority of the victims of cell phone and internet bullying have only experienced bullying once or twice ever.

5.4.2.2 *How long did the bullying last (for the victim)?*

In this section the victims had to indicate how long the bullying lasted. The participants reported as follows:

Bullying by means of the cell phone: 36% reported that it lasted one or two weeks; 18% that it lasted about a month; 18% that it has lasted about six months and none that it had lasted about a year or that it had gone on for several years.

Bullying by means of the internet: 48% indicated that it lasted one or two weeks; 20% that it lasted about a month and 4% that it had lasted about six months. Similar than with internet victimisation, none reported that it had lasted about a year or that it had gone on for several years.

Thus, the bullying (cell phone and internet), for most victims did not last too long, but at least one or two weeks.

5.4.2.3 *How often did the bullying occur (by the bully)?*

In this section cyberbullies had to indicate how often they bullied another person. The participants reported as follows:

Bullying by means of the cell phone: 100% indicated that they bullied by using a cell phone only once or twice; none reported that it occurred 2 or 3 times per month or that it happened once per week or several times a week or more.

Bullying by means of the internet: 43% indicated that they bullied by using the internet only once or twice; 14% that it happened 2 or 3 times per month and 14% that it

happened once per week. Similar to internet perpetration, none reported that it happened once per week or several times a week or more.

Accordingly, most of the perpetrators (via cell phone and internet) indicated that they never bullied someone more than once or twice.

5.4.2.4 Identification of the cyberbully (class/school-related)

In this section the victims had to indicate how they know the bully – class/school-related. The participants reported as follows:

Bullying by means of the cell phone: 2,67% indicated that the bully was in their class; 3,74% that the bully was in a different class, but in the same year; 1,07% that the bully was in another year (younger or older); 5,35% that the bully was not in their school and 4,28% did not know who had bullied them.

Bullying by means of the Internet: 4,28% reported that the bully was in their class; 6,95% that the bully was in a different class, but in the same year; 7,49% that the bully was in another year (younger or older); 6,95% that the bully was not in their school and 4,28% did not know who had bullied them.

For both cell phone (5,35%) and internet bullying (6,95%), the bullies were not close to them (they were not in their school). The bullying also occurred anonymously in both cell phone (4,28%) and internet (4,28%) bullying.

5.4.2.5 Identification of the cyberbully (gender related)

In this section the victims had to indicate who their bully was – if their bully was a boy or a girl/ several boys or girls/ both boys and girls/ they did not know who bullied them. The participants reported as follows:

Bullying by means of the cell phone: 5,88% indicated that it is was mainly one girl; 5,35% that it was several girls; 3,74% that it was mainly one boy; 2,67% that it was several boys; 1,60% that it was both boys and girls and 3,21% did not know the gender of their cell phone bully.

Bullying by means of the internet: 1,07% reported that it is was mainly one girl; 1,07% that it was several girls; 3,74% that it was mainly one boy; 0,53% that it was several boys; 1,07% that it was both boys and girls and 3,21% did not know the gender their internet bully.

Thus, in terms of gender it seems as if the victims do know who bullied them. Girls bully the most via cell phones, either one-to-one or group bullying, but less on the internet. Boys bully more on the internet than girls. If one boy bullies another person, it occurs equally via cell phone or the internet. If several boys bully another person, it occurs mainly via a cell phone. Yet again, a few participants did not know the gender of their bully (3,21%) – it was thus done anonymously.

5.4.2.6 *Cyberbullying platforms*

In this section the victims had to identify how they had been bullied – thus on which online media platform. The participants reported as follow:

Bullying by means of the cell phone: 16,58% indicated that it occurred through text messages; 4,28% through multimedia texts (photos and videos) and 4,81% through phone calls.

Bullying by means of the internet: 0,53% reported that it occurred through e-mails; 5,35% through chat rooms; 14,44% through social networking websites (e.g. Facebook, YouTube, Instagram, and Twitter); 1,07% through file sharing websites (e.g. YouTube, flickr) and 0,53% through a blog.

It seems as if cell phone bullying occurs four times more via text messages than via photos, videos and phone calls. The bullying via cell phones are thus clearly direct and verbal. It seems if participants are bullied more by means of social networking websites (e.g. Facebook, YouTube, Instagram, and Twitter). This group seems to be more at risk of being bullied via the internet than those who make use of chat rooms (three times less at risk). Very few participants were bullied via e-mails, file sharing websites and blogs – thus less risk.

5.4.2.7 *Emotional reactions of victims*

In this section the victims had to identify how they felt when they were bullied. The participants reported as follows:

Emotional reaction being bullied via cell phone: 8,02% indicated that they felt embarrassed; 8,56% upset; 13,37% afraid or scared; 8,56% alone and isolated; 8,02% defenceless; 12,30% depressed; 4,28% stressed; 8,02 not bothered and 11,23% angry.

Emotional reaction being bullied via internet: 2,14% reported that they felt embarrassed; 3,21% upset; 1,60% afraid or scared; 2,67% alone and isolated; 2,14% defenceless; 2,14% depressed; 0,53% stressed; 4,28% not bothered and 3,21% angry.

It is clear that those who had been bullied in a more direct and personal way (cell phone) experienced much more negative emotional reactions than those who had been bullied by means of the internet, with feeling depressed, scared and angry almost twice as high as feeling embarrassed, upset, scared, alone and isolated and defenceless.

5.4.2.8 Protective behaviour of victims

In this section the victims had to identify what they did to protect themselves or how they coped when they were bullied. The participants reported as follow:

Cell phone: 5,35% indicated that they felt helpless; 10,16% ignored what was happening, hoping it would go away; 5,35% turned their mobile off; 5,35% told a friend; 1,60% told a teacher; 5,88% told a parent/carer; 4,81% asked the person directly to stop texting/phoning them; 8,02% blocked the texts/phone calls; 1,07% changed their mobile number; 0,53% reported the bullying to the mobile phone company and 2,14% retaliated.

Internet: 3,74% indicated that they felt helpless; 9,09% ignored what was happening, hoping it would go away; 3,74% stopped using the internet; 2,67% told a friend; 2,67% told a teacher; 2,14% told a parent/carer; 2,14% asked the person directly to stop bullying them; 5,88% blocked the person; 1,60% contacted the internet service provider and reported the bully and 2,67% retaliated.

The participant's made use of different coping mechanisms. 15,51% of the cell phone victims and 12,83% of the internet victims made use of passive avoidant coping (felt helpless and ignoring what was happening). Twice as many victims (32,08% for cell phone bullying and 20,84% for internet bullying) made use of constructive coping mechanisms: turning the device off/stop using it, seeking social support, being assertive, thus asking bully to stop, or environmental mastery i.e. blocking, change number or to report the bullying to service providers. Even though many adolescents make use of constructive coping mechanism, not many turn to their teachers or peers for help. Destructive coping by means of retaliation was less prominent.

5.4.3 Discussion

In this sample group demographic differences did not play a significant role with regard to CB. With regard to gender, this findings are in keeping with that of Livingstone et al. (2016), who found that CB occurs more or less equally among both genders. However, this is in contradiction with multiple studies indicating that females usually are significantly more prone to cyberbullying than males. Hinduja and Patchin (2015) found that females

(40,6%) cyberbullied others more than males (28,2%). Bergman and Baier (2018) explain that girls rather opt to use indirect and verbal forms of aggression (commonly related to CB) more than direct or physical power. Smith (2019) concurs that more girls are CB bullied than boys, reasoning that it could be that girls are typically involved in reputation damage activities rather than physical fights, they thus make use of social networking sites to damage another person's reputation. Even though the findings of this study regarding the relationship between gender and CB were insignificant, the nature of CB section indicated that girls are more prone to bullying via cell phones and boys via the internet (see 5.4.2.5). With regard to identifying their bully, this finding is in keeping with existing literature, since some of the participants indicated that they did not know their bully. Anonymity as a unique feature of CB played a role here. Anonymous bullying leaves the victim powerless (Cassidy, Jackson & Faucher, 2016). The age and grade of participants were insignificant in this study, but it differs from other studies. With traditional bullying it seems if victimisation declines as children get older, with CB it is quite the opposite. As children grow older and become adolescents, CB behaviour increases. This could be due to the fact that they have more access to online mediums (Cross et al., 2015). In this study the learner's sexual orientation did not seem to play a significant role in being bullied or being a bully. Contradicting this study, the CDC (2018) found that lesbian, gay and bisexual adolescents experienced twice as much (27,1%) CB as heterosexual (13,3%) adolescents and 22% of adolescents who identified as unsure were bullied. It is not clear if the learners in this study who identify with the LGBTQ community have disclosed their status to their peers or not.

With regard to CB platforms, many participants were bullied via social networking websites. Again, this is in line with existing literature since social networking websites form part of another unique feature of CB, the unbounded audience feature. These networking sites can be used to torment another person semi-publicly or publicly. The bullying is thus limitless (Pieschl, Kulmann & Porsch, 2015, Strasburger et al, 2014 & Hinduja & Patchin, 2019).

Concerning the emotional reactions of participants, Balakrishnan (2018) found in accordance with this study that 70–90% of the victims have experienced anger, sadness and depression. This study found that cell phone bullying is more harmful than internet bullying. Nixon (2014) found the contrary and stated that adolescents experienced CB via the computer (e.g. e-mails) more harmful than via their phone (e.g. texts and phone calls). However, Nixon (2014) mentions that photos and videos are very harmful, and this can be sent via either a cell

phone or the internet. Regardless of whether the bullying is via the internet or cell phone, adolescents are affected by it.

When considering how victims protect themselves from either cell phone or internet bullying, the result of this study that they do not turn to peers or teachers for help, concur with Burton et al. (2016). These researchers found that learners do not necessarily turn to their teachers for advice and guidance about internet use and not many feel that they cannot turn to their friends either. Adolescents easily turn to their friends when they need advice on internet use, but when they experience something negative on the internet, very few do so. They even try to avoid peers and withdraw from events (Nixon, 2014). Ditch the Label (2017) found that 65% of CB victims have spoken to someone (teachers, family members, friends, counsellors, health professionals, the police, social media platforms or a helpline) about the bullying, but 35% opted not to. The third that opted not to speak to someone provided the following reasons: I'll be called a snitch (42%), scared of it getting worse (39%), it won't be taken seriously (34%), I can deal with it on my own (33%), embarrassed (30%), I don't think it is serious enough (29%), it didn't affect me enough (28%), I have done it in the past and nothing happened (24%) and my teachers don't care (23%). Half of the sample in the study of Balakrishnan (2018) did nothing after being bullied and a third retaliated. In this study, retaliation was the least prominent action after bullying (2,14% for cell phone and 2,67% for internet bullying). In conclusion, it is concerning to see that many adolescents feel they cannot turn to a trusted figure, it seems if they rather ignore what is happening to them or retaliate – it is thus a vicious cycle. The effectiveness of coping strategies should be examined further (Nixon, 2014).

The next section presents the results and discussion on the effect of CB on the level of depression and the MWB of the CB involved groups.

5.5 RESULTS AND DISCUSSION: THE EFFECT OF CB ON THE LEVEL OF DEPRESSION AND THE MWB OF THE CB INVOLVED GROUPS (VICTIMS AND BULLIES)

This section attempted to *extend* the current knowledge of relationships between CB and MWB and CB and MDD. The results related to objectives 1.5 vii and 1.5 viii are presented below. An in-depth discussion is provided at the end of the section.

5.5.1 Relationship between CB and MDD, focusing on both the victim and the bully (objective 1.5 vii)

In this section the PHQ-9 results of the whole sample group are presented, thereafter that of the relationship between CB victims and MDD and CB bullies and MDD.

5.5.1.1.1 PHQ-9 findings of the whole sample group

The standardised questionnaire (see Addendum A, section 2) was scored by means of a 4-point Likert scale where 0 was *not at all*, 1 was *several days*, 2 was *more than half the days* and 3 was *nearly every day*.

Table 5.13:

PHQ-9 findings of the Whole Sample Group

Construct	N	Mean	Std Dev	Minimum	Maximum
Questions 1–9	153	8.12	6.53	0.00	25.00
(Precaution question)	143	0.38	0.82	0.00	3.00

According to Kroenke et al. (2001), there are five different levels of depression: minimal (0–4), mild (5–9), moderate (10–14), moderately severe (15–19) and severe (20–27). Although the sample group's average level of depression is mild (mean=8,12), the mean is misleading when one considers Figure 5.7, which indicates the distribution of the sample group's level of depression.

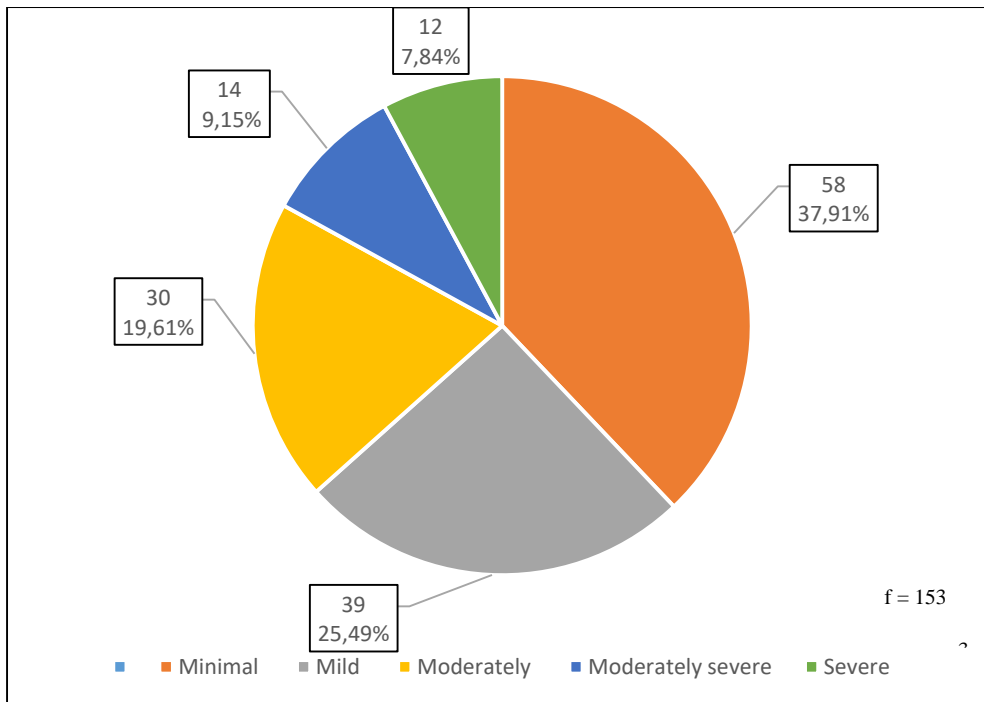


Figure 5.6: Average depression status of participants

These findings indicate that almost a fifth of the sample group experienced moderately severe (9.15) and severe depression (7.84). Another fifth experienced moderate depression (19.61). Thus, one to two out of five participants suffered from MDD – which highlights the level of distress the CB victims experience. The relationship between CB victims and MDD is presented next.

5.5.1.1.2 Relationship between CB victims and MDD

Differences between two group means were interpreted according to Cohen’s effect sizes, d. Group 1 have been victims of CB and Group 2 have not been victims of CB.

Table 5.14:

Relationship between CB victims and MDD

Construct	Group	N	Mean	Std dev	p-value*	d-value
Questions 1–9	1	27	11.30	7.22	0.0128	0.55
	2	94	7.31	6.05		

Note: d < 0.4 = Small effect size; d = 0.4–0.64 = Medium effect size; d = 0.65 – ≥ 0.8 = Large effect size and practical meaningful. *statistically significant at 0.05 level

As can be seen from Table 5.14, there was a difference in MDD between CB victims and non-victims with a medium effect (0.55). Meaning that CB victims (mean = 11.30) level of depression was significantly **higher** than non-victims (mean =7.31). The CB victims thus experienced moderate depression and the non-victims mild depression. The different depression levels of the victims are presented next.

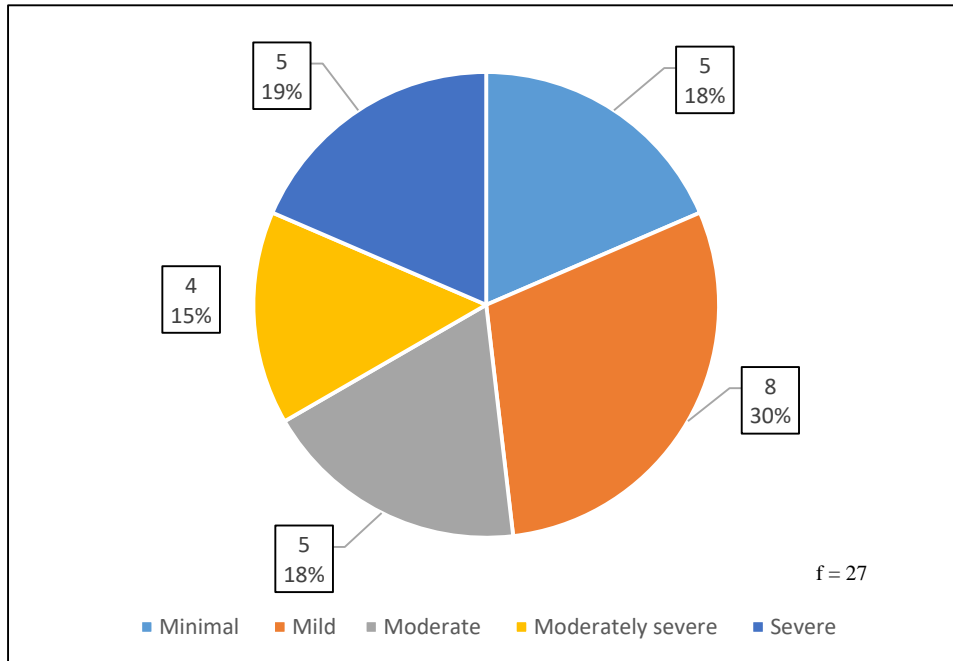


Figure 5.7: Average depression status of victims

It is alarming to see that 34% of the victims experienced moderately severe to severe depression. The relationship between CB bullies and MDD is presented next.

5.5.1.1.3 Relationship between CB bullies and MDD

Differences between two group means were interpreted according to Cohen’s effect sizes, d. Group 1 *have been cyberbullied* and Group 2 *have not been cyberbullies*

Table 5.15:

Relationship between CB bullies and MDD

Construct	Group	N	Mean	Std dev	p-value*	d-value
Questions 1–9	1	9	12.14	6.45	0.1033	0.61
	2	125	8.11	6.55		

Note: d < 0.4 = Small effect size; d = 0.4–0.64 = Medium effect size; d = 0.65-- ≥ 0.8 = Large effect size and practical meaningful. *statistically significant at 0.05 level

As can be seen from Table 5.15, there was a difference in MDD between CB bullies and non-bullies with a medium effect (0.61). This means that the CB bullies' (mean = 12.14) level of depression was significantly **higher** than the non-bullies (mean = 8.11). The CB bullies thus experienced moderate depression and the non-bullies mild depression. Figure 5.9 below presents the different depression levels of the CB bullies.

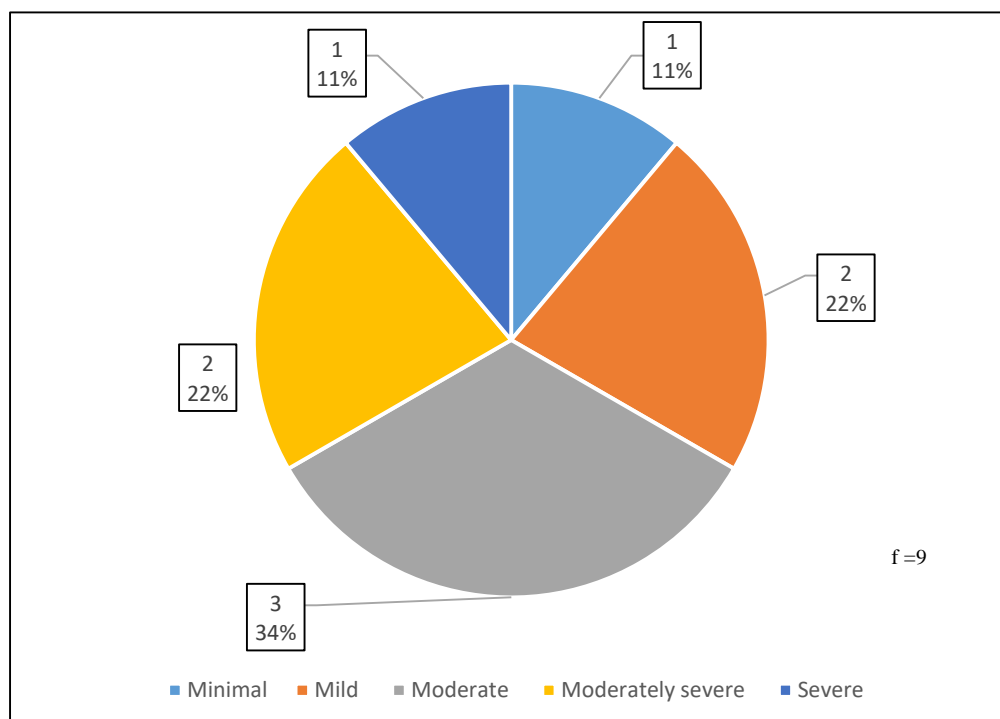


Figure 5.8: Average depression status of bullies

Thirty-three percent of the CB bullies experienced moderately severe to severe depression – thus *both* the CB victims and the CB bullies in this study struggled with significant levels of MDD.

5.5.2 Relationship between CB and aspects of MWB, focusing on both the victim and the perpetrator (objective 1.5 viii)

In this section the MHQ-SF findings of the whole sample group are presented, thereafter the relationship between CB victims and MWB and CB bullies and MWB.

5.5.2.1.1 MHC findings of the whole sample group

The standardised questionnaire (see Addendum A, section 3) was scored by means of a 6-point Likert scale where 0 was *never*, 1 was *once or twice*, 2 was *about once a week*, 3 was *2 or 3 times a week*, 4 was *almost every day* and 5 was *every day*.

Table 5.16:

MHC Findings of the Whole Sample Group

Construct	n	Mean	Std Dev	Minimum	Maximum
EWB	134	10.72	3.65	0.00	15.00
SWB	133	11.42	6.99	0.00	25.00
PWB	132	21.31	6.75	0.00	30.00
Total	134	43.50	14.87	0.00	70.00

EWB – Emotional Well-being; SWB – Social Well-being; PWB – Psychological Well-being

Although fewer participants completed this section (n=134), the Cronbach alpha was still very good and therefore the results are considered reliable. These results indicate that the overall mental health of the group is somewhat average in terms of their EWB, meaning they are as happy and satisfied with their lives as most other people. In terms of their PWB, they are functioning as well as most other people their age. However, their SWB falls within a low average range, meaning their social functioning and status are experienced as lower than that of the average person completing this scale. Figure 5.10 below presents the MWB status of the sample group.

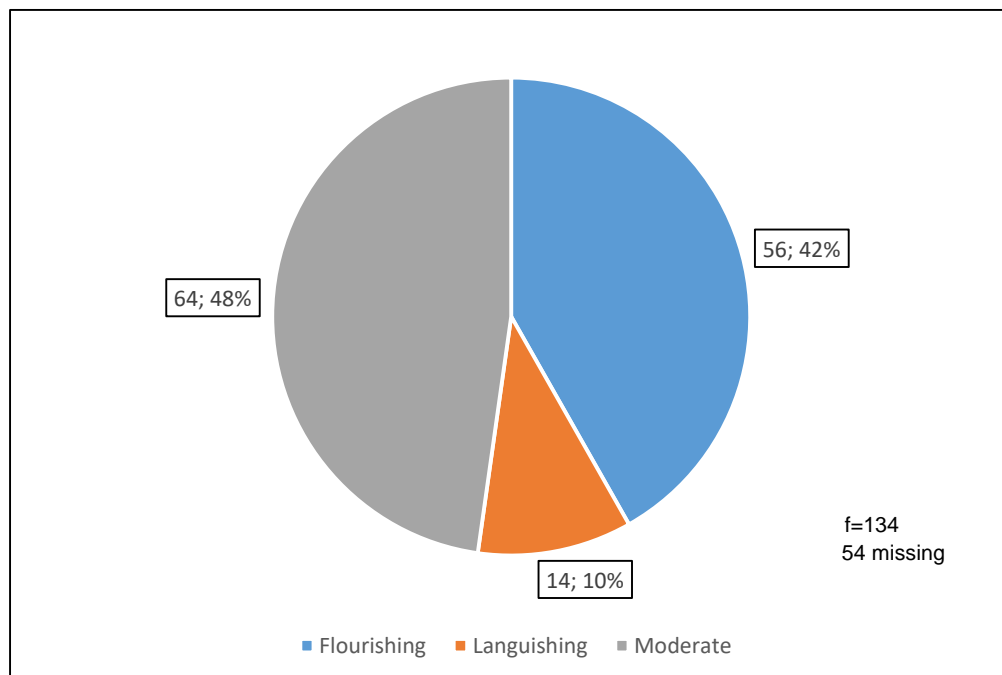


Figure 5.9: Average MWB status of participants

The results of Figure 5.10 corroborate the moderate levels of overall mental well-being in the sample. Ten percent of the sample group were in a languishing state of MWB, 42% were flourishing and almost half (48%) were in a moderate state of well-being. Their overall MWB is thus in need of improvement. The relationship between CB victims and MWB is presented next.

5.5.2.1.2 Relationship between CB victims and MWB

Differences between two group means were interpreted according to Cohen's effect sizes, *d*. Group 1 *have been* CB victims and Group 2 *have not been* CB victims.

Table 5.17:

Relationship between CB victims and MWB

Construct	Group	N	Mean	Std dev	p-value*	d-value
SWB	1	15	7.40	4.98	0.0029	0.70
	2	94	12.29	7.01		
PWB	1	15	17.77	7.98	0.0614	0.54
	2	93	22.10	6.26		
Total	1	15	35.22	14.91	0.0245	0.68
	2	94	45.33	14.29		

Note: $d < 0.4$ = Small effect size; $d = 0.4-0.64$ = Medium effect size; $d = 0.65 - \geq 0.8$ = Large effect size and practical meaningful. *statistically significant at 0.05 level

As can be seen from Table 5.17, there was a highly significant difference in SWB between CB victims and non-victims with a large effect ($d=0.70$). This means that CB victims have a significant lower level of SWB than those who have not been cyberbullied (Group 2) (mean = 12.29). There was also a statistically significant difference in PWB between CB victims and non-victims with a medium effect ($d = 0.54$). CB victims thus reported significantly lower levels of PWB (mean = 17.77) than those who have not been cyberbullied (mean = 22.10) and the effect of CB on their MWB was moderate. Figure 5.11 below presents the MWB status of the CB victims.

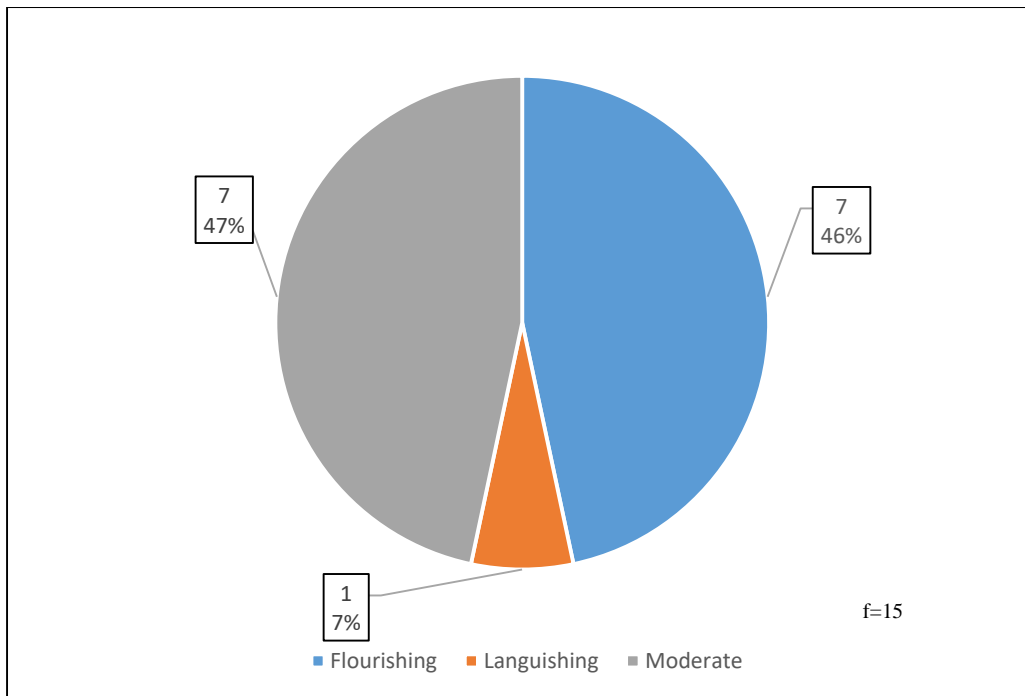


Figure 5.10: Average MWB status of victims

Despite the fact that CB had a moderate negative effect on their MWB and the CB victims portrayed significant lower levels of SWB and PWB than those who were not cyberbullied, their overall levels of mental health distribution seems fair. Almost equal numbers were either flourishing (46%) or experiencing moderate levels of MWB (47%), with fewer than 10% of them languishing (7%). Nevertheless, it still means half of them can work to improve their overall MWB – especially their SWB. The relationship between CB bullies and MWB is presented next.

5.5.2.1.3 Relationship between CB bullies and MWB

Differences between two group means were interpreted according to Cohen's effect sizes, d. Group 1 have been CB bullies and Group 2 have not been CB bullies.

Table 5.18:

Relationship between CB bullies and MWB

Construct	Group	N	Mean	Std dev	p-value*	d-value
SWB	1	7	8.57	4.08	0.1207	0.41
	2	113	11.47	7.09		
PWB	1	7	17.54	6.37	0.1481	0.60
	2	112	21.60	6.75		
Total	1	7	36.98	12.86	0.2269	0.45
	2	114	43.68	14.94		

Note: $d < 0.4$ = Small effect size; $d = 0.4-0.64$ = Medium effect size; $d = 0.65 - \geq 0.8$ = Large effect size and practical meaningful. *statistically significant at 0.05 level

As can be seen from Table 5.18, there was a difference in PWB between CB bullies and non-bullies with a medium effect (0.60), meaning that CB bullies' (mean =17.54) level of PWB was significantly **lower** than non-bullies (mean =21.60). There was also a difference in SWB between CB bullies and non-bullies with a medium effect (0.41). This means that CB bullies' (mean =8.57) level of SWB was significantly **lower** than non-bullies (mean =11.47). Figure 5.11 below presents the MWB status of the victims.

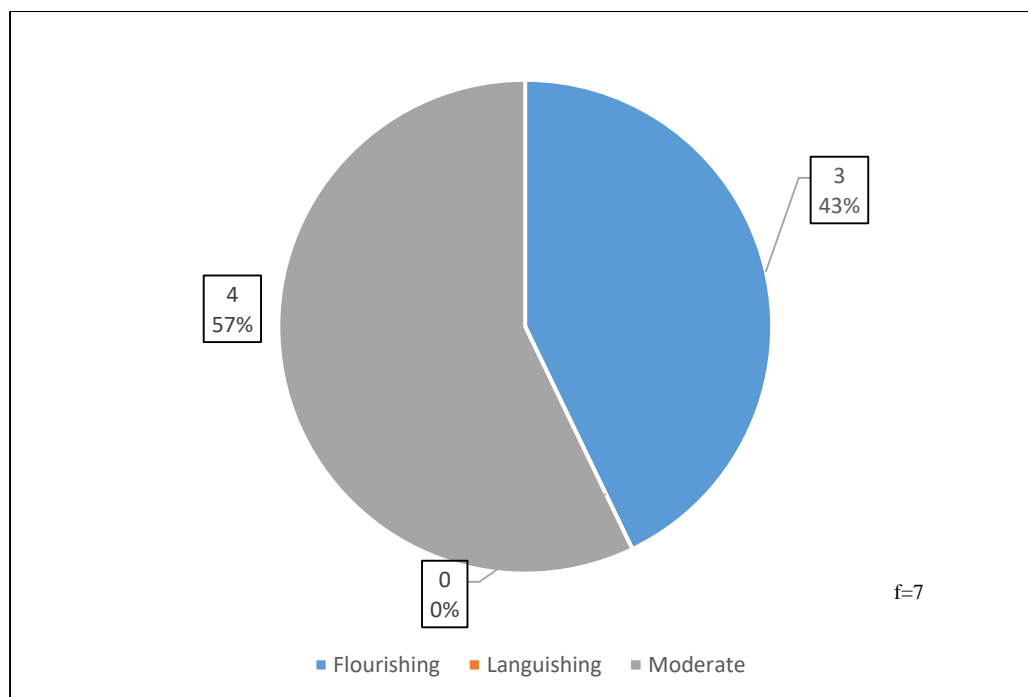


Figure 5.11: Average MWB status of bullies

These findings are quite similar to the CB victim findings. Despite the fact that CB had a moderate negative effect on their MWB and the CB bullies portrayed significantly lower levels of SWB and PWB than those who did not bully, their overall levels of mental health distribution seems fair. Almost equal numbers were either flourishing (43%) or experiencing moderate levels of MWB (57%), with none of them languishing. Nevertheless, it still means half of them can work to improve their overall MWB – specifically their SWB.

5.5.3 Discussion

The findings about the prevalence of MDD of the whole sample group (moderate depression, 19,61%; moderately severe, 9,15% and severe depression, 7,84%) is in line with other studies. Likewise, SADAG (2014) states that 23,6% of adolescents in South Africa struggle with depression. Noteworthy, not many studies have used the PHQ-9 to explore the level of depression among CB adolescent victims and bullies, especially in the South-African context. Given the excellent Cronbach alphas it has yielded in our study, it could be valuable instrument to consider in future South African studies. One Swedish study conducted by Selkie, Kota, Chan and Moreno (2015) concentrated only on the relationship between CB and depression among female college students. Another study conducted in Greece by Kokkinos, Antoniadou and Markos (2014) also focused on university students. The findings of this study thus contribute to and extends the existing knowledge about CB and depression, since

the PHQ-9 findings clearly indicates that both the victim and the bully have significantly higher levels of depression than their non-involved peers and that CB plays a moderate role. Regardless of using different depression scales, the findings of other studies are in line with this study. Cohen-Almagor (2018) concurs that both victims and bullies could be at risk of depression. When bullies struggle with depression it might be one of the main reasons why they bully others (Kowalski et al., 2014). Cyberbullies struggle with negative emotions such as anger, sadness, frustration, fear and embarrassment (Nixon, 2014). Hinduja and Patchin (2015) proclaim that both victims and bullies have attempted suicide, almost twice as many as adolescents not involved in CB. Spears, Taddeo, Daly, Stretton and Karklins (2015) found in their study that the victims of CB experienced poorer mental health, lower levels of social connectedness, stress, anxiety and depression than the non-involved group. Stress and anxiety are two consequences of CB that fell outside the scope of this study. Nevertheless, they are factors that should be considered in the future.

The SWB of the CB victims were significantly lower than the SWB of the non-involved. The SWB of the bullies were also lower. This ultimately means that both the victims and the bullies struggle with the following: to feel that you belong in the society, acceptance of their own qualities or those of others, to feel that you are contributing to the society and overall optimism about the society (see Table 3.2). Likewise, the PWB of both the victims and the bullies were lower than the non-involved, meaning that they struggle with positive self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life and to grow personally (see Table 3.1). The work of other authors, such as Hinduja and Patchin (2009), Mirsky and Omar (2015), Chassiakos, Radesky, Christakis, Moreno and Cross (2016); Halpern, Piña and Vásquez (2017) and Vaillancourt et al. (2017) concur that CB has an effect on the MWB of adolescents. However, the researcher could not find any studies that used the MHQ-SF questionnaire to explore the effect CB has on the MWB of adolescents. This makes this study unique, because the MHQ-SF questionnaire measures emotional, social and psychological well-being and is standardised for the South African context. Betts (2016) concurs with the findings of this study that not only victims of CB struggle with their MWB, but the bullies as well. According to Spears et al. (2015), since CB can compromise the MWB and mental health of adolescents it should be seen as a public health risk. Further research is necessary to investigate the longitudinal effect CB has on the MWB of adolescents (Betts, 2016).

5.6 SUMMARY

In this chapter the results of the data analysis were presented and discussed in four sections. The demographic data of the 187 participants were presented first. It included the gender, age, grade, disability and sexual orientation of the participants. The findings of the data that were derived from the results for the whole sample group. It included participants' experience of the school environment, the nature of electronics use among participants, the prevalence of traditional bullying and CB and the relationship between traditional bullying and CB. The key findings here were that the participants do have a fair relationship with their schools and peers, but that the schools can do more to make learners aware of bullying policies. The sample group's electronics use is in line with international trends, since most of the participants did have adequate access to the internet (either in their own room, 27,27%; or in the living room, 12,30% or outside their home, 64,29%) and they spend a substantial amount of time on devices (three hours or more, 51,38%) – both these factors put them at risk for being bullied or to be the bully. According to most of the participants (75,28%), they do have a good relationship with their parents, but not so many of the parents (45,30%) discussed rules with them about being online – another risk factor for CB involvement. The traditional bullying victims (27,33%) of this study were somewhat more than the CB victims (20,95%), with the traditional bullying bullies (10%) also being slightly more than the cyberbullies (6,13%). This is in line with international trends and even though CB prevalence is lower than traditional bullying, it should not be overlooked as a problem. The findings indicate that there is a definite and moderate relationship between CB and traditional bullying, once again in line with international trends.

The findings that focused only on CB involvement followed. Demographic differences with regard to CB were highlighted and the nature of CB among the participants were discussed. With regard to the demographic difference and CB involvement, the findings of this study contradict most other studies, since gender, age, grade and sexual orientation did not play a significant role in whether someone is a victim of a bully. The nature of CB involvement in this study were presented and aspects such as identification of the bully, CB platforms, emotional reactions of victims and protective behaviours victims used were discussed.

Lastly, but most prominently, the results on the relationship between CB and the level of MDD of the participants and the relationship between MWB and CB were presented.

There was a difference in MDD between CB victims and non-victims with a medium effect ($d=0.55$) and a difference in MDD between CB bullies and non-bullies with a medium effect ($d=0.61$). The results thus indicated that both the victims and bullies of the sample group struggle with MDD and the different levels of severity were indicated. Thirty-four percent of the victims and 33% of the bullies experienced moderately severe to severe depression. There was a highly significant difference in SWB between CB victims and non-victims with a large effect ($d=0.70$) and a significant difference in PWB between CB victims and non-victims with a medium effect ($d = 0.54$). There was difference in SWB between CB bullies and non-bullies with a medium effect (0.41) and a difference in PWB between CB bullies and non-bullies with a medium effect (0.60). Although the CB victims' and CB bullies' overall MWB fall within a flourishing (CB victims – 46%, CB bullies – 43%) and moderate (CB victims – 47%, CB bullies – 57%) level of MWB, their MWB did not seem optimal – especially their SWB, and a small 7% CB victims was languishing (i.e. the total absence of MWB). These findings are in keeping with other South African as well as international studies. In Chapter 6 the findings are derived, recommendations to relevant role players are made, limitations and suggestions of the study are presented and the contribution of the study is highlighted.

CHAPTER 6

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This concluding chapter offers a reminder of the research rationale and the research problem. This is followed by the main findings derived from the literature review and the empirical research. Subsequently the researcher discusses recommendations for relevant role players, outlines the limitations of the study and suggests future research areas. Lastly, the contributions of the study are outlined.

6.2 REMINDER OF THE RATIONALE FOR THE STUDY AND THE RESEARCH PROBLEM

The literature review indicated that CB is prevalent globally, including South Africa (Burton & Mutongwizo, 2009; De Lange & Von Solms, 2012; Newall, 2018). CB cannot be explored without looking into traditional bullying as well, since it seems as if these two bullying forms are linked (Burton & Mutongwizo, 2009; Hasebrink, et al., 2011; Vieira, Rønning, Mari & Bordin, 2019). According to available literature there is a likely relationship between the effect of CB on the MWB of adolescents (Brailovskaia, Teismann & Margraf, 2018; Cowie, 2011; Cross, Lester & Barnes, 2015; Larranaza & Yubero, 2015; Lucas-Molina et al., 2018 & Tokunaga, 2010). Furthermore, the victim *and* the bully may suffer from depression (Cohen-Almagor, 2018), but little is known about the mental health and emotional well-being of the bully (Kowalski et al., 2014).

This study aimed to contribute to the existing body of scholarship on the prevalence, nature and effects of CB on the MWB of adolescents (victims and bullies) and to extend the knowledge of relationships between CB and MWB and CB and depression. The main research question, namely: *What is the prevalence and nature of CB and its effect on the MWB of adolescents in the Matlosana municipal area (Dr Kenneth Kaunda District, North West province, South Africa)?* To answer this question the study focussed on the prevalence and nature of CB and its effect on and relationship with the MWB of adolescents (*both* the victim and the bully) in the Matlosana municipal area (Dr Kenneth Kaunda district, North West province, South Africa). The main conclusions of this study are presented next.

6.3 CONCLUSIONS

The sample was an availability sample and not representative of the Matlosana district, therefore generalisations to the rest of South Africa are not possible. The following conclusions result from the literature review in Chapters 2 and 3 and the findings and discussion in Chapter 5.

6.3.1 Conclusion in relation to research objective number one

Regarding research objective number one, exploring how adolescents in the Matlosana municipal area experience their school environment, the participants answered ten questions (see Addendum A, questions 5–14) on this aspect. It was found that the majority of adolescents felt they had a favourable relationship with their peers, school and teachers (see Table 5.1). In relation to bullying policies, more than half of the learners were either unaware or unsure of whether their schools have a bullying policy and less than a third said that their school's bullying policy includes dealing with CB (see Table 5.2). The literature review indicated that the school climate (see 2.3.2.4.4) and relationships adolescents have with their school and peers (see 2.3.2.4.3) can have a large effect on CB involvement.

Consequently, the following conclusion can be drawn: even though the adolescents in this study reported in general that they had a favourable relationship with the peers, school and teachers, yet learners were bullied, either traditional bullying or CB. One might conclude that if more than half of the learners in the school is unsure if the school has a bullying policy, the school probably does not take an active or proactive stand against traditional bullying and CB or even talk openly about the topic in the school. Another conclusion one might make is the schools might probably be unaware of how much their learners are bullied. This then begs the question why learners in general reported that they have a favourable relationships with their peers, school and teachers if they are not protected against bullying? It is crucial that schools should realise the important role they play in contesting the CB phenomenon. Recommendations for schools are discussed at a later stage (see 6.5.1.1).

6.3.2 Conclusion in relation to research objective number two

Regarding research objective number two, the nature of electronics use among adolescents in the Matlosana municipal area, the participants answered five questions (see Addendum A, questions 15–19) on this aspect. It is clear from the findings that the majority of adolescents from the sample group uses electronic devices extensively. Most of the participants in this study do have access to the internet, either on their own mobile device

(see Table 5.3) or somewhere in their home (see Table 5.4) or elsewhere (see Table 5.5), and more than half of the sample group spend more than 3 hours per day on electronic devices (see Table 5.6). Literature indicates that when adolescents spend a considerable amount of time with electronic devices, it may put them at risk for CB (see 5.3.2).

The following conclusion can therefore be made: Since literature indicates that when adolescents spend a considerable amount of time with technology it may put them at risk for CB, the majority of this sample group appears to be at a high risk for CB. It is thus an implication that parents should take note of and it is discussed further under recommendations for parents (see 6.5.1.2).

6.3.3 Conclusion in relation to research objective number three

Regarding research objective number three, the prevalence of traditional bullying and CB among adolescents, the participants filled in two questions (see Addendum A, questions 20 and 23) on this aspect. According to the available literature, CB and traditional bullying are unquestionably prevalent globally as well as in South Africa (see 1.2 par 2, 3 and 4). The findings found similar prevalence – one out of five of the participants were cyberbullied and one to two out of five were bullied traditionally (see Tables 5.8 and 5.9). The bullies were less prevalent (see Tables 5.10 and 5.11), with traditional bullying once again somewhat more prevalent than CB. traditional bullying was thus more prevalent in this study, but the CB prevalence is still a rising concern.

As a result, the following conclusion can be reached: CB and traditional bullying were prevalent among the sample group with traditional bullying somewhat more prevalent than traditional bullying. Both these bullying forms are thus a dilemma for parents and schools in the Matlosana municipal district and the Department of Education.

6.3.4 Conclusion in relation to research objective number four

Regarding research objective number four, whether a relationship exists between CB and traditional bullying, the finding was that there is a moderate relationship between CB bullies and traditional bullying bullies as some bullies opted to bully others traditionally *and* online (see Table 5.13). In keeping with these findings, literature indicate that CB is very much intertwined with traditional bullying, since it is seen as an extension of traditional bullying. CB and traditional bullying share common features such as power imbalance, repetition and intentionality (see 2.2.2.1), *but* CB also has some unique features such as anonymity, unbound audience and limitless victimisation risk (see 2.2.2.2).

The following conclusion can therefore be derived: A moderate relationship does exist among the sample group's CB bullies and traditional bullying bullies, since some bullies bully others on both platforms.

6.3.5 Conclusion in relation to research objective number five

Regarding research objective number five, whether there are differences in gender, age, disability and sexual orientation with regard to the prevalence of CB, the findings found insignificant differences. The literature review found the contrary, indicating that there are definite demographic factors that put adolescents more at risk to being bullied or to bully. With regard to gender there is contradicting literature on whether girls or boys are more prone to be either victims or bullies (see 2.2.3.1). The mean age for CB involvement seems to be between 15 and 16 years (see 2.2.3.1). Adolescents who identify as LGBTQ are more at risk of being bullied (see 2.2.3.2), as well as adolescents who have a disability (see 2.2.3.3).

Hence, the following conclusion can be reached: Among this sample group demographic differences did not play a role in relation to CB, indicating that anyone in this sample could easily become a victim of CB or be a cyberbully.

6.3.6 Conclusion in relation to research objective number six

Regarding research objective number six, the nature of CB among adolescents in the Matlosana municipal area, the participants filled in twelve questions (see Addendum A, questions 21, 22, 24–33) on this aspect. The majority of the victims have only experienced CB once or twice and luckily it did not last too long, but at least for one or two weeks. The bullies also indicated that when they did bully someone, it did not occur more than once or twice (see 5.4.2.1–5.4.2.3). Even though this is the case, CB involvement did have a moderate effect on the MWB of the victims and bullies in this sample group and their degree of depression was rather high. One could thus conclude that even though the bullying did not last long or happen over a long time, it still had a tremendous psychological effect on the victims and the bullies.

For both cell phone and internet bullying, some of the bullies were not close to the victims (they were not in their school) and the bullying occurred anonymously in some cases (see 5.4.2.5). The anonymity and unbound audience factors that make CB unique according to available literature (see 2.2.2.2) came to the fore in the empirical research. Social networking websites were the platform where victims were most at risk of being bullied (see 5.4.2.5). The uniqueness of the CB dilemma should thus not be underestimated.

The majority of the participants felt afraid or scared, depressed and angry when they were bullied on their cell phone and less so when on the internet. Some said they were not bothered (see 5.4.2.7). The adolescents mostly either coped actively (e.g. telling a trusted loved one or blocking the person) or to a lesser extent passively (e.g. ignoring the bullying) (see 5.4.2.8). Yet, the effectiveness of these coping mechanisms has not been determined and could be seen as a future research topic.

6.3.7 Conclusion in relation to research objective number seven

Regarding research objective number seven, namely whether a relationship exists between CB and MDD, the participants filled in the PHQ-9 (see Addendum A, section 2). The findings indicated that the victims of CB experienced moderate depression and the non-victims mild depression (see Table 5.15). The cyberbullies experienced moderate depression and the non-bullies mild depression (see Table 5.16). It was alarming to see that 34% of the victims and 33 % of the bullies experienced moderately severe to severe depression. It is thus clear that the victim *as well as* the bully experience depression. In keeping with literature, adolescents are a vulnerable group for depression onset, suicide ideation and attempts (see 3.3.4). Almost 25% of South African adolescents struggle with depression and 1 in 10 deaths among adolescents in South Africa is suicide-related.

Hence, one can conclude that CB does have quite a negative effect on the participants and that a relationship does exist between CB and MDD. Adolescents who bully or who are bullied are thus at risk of experiencing MDD. This is therefore a serious concern for parents, schools and the Department of Education.

6.3.8 Conclusion in relation to research objective number eight

Regarding research objective number eight, namely whether a relationship exists between CB and MWB, the participants filled in the MHQ-SF (see Addendum A, section 3). The literature review indicates a definite relationship between CB and MWB. However, the literature mainly focuses on the victims. The empirical data in this study indicates a clear, moderate relationship between CB and MWB, for both the bully and the victim. The victims of CB experience significantly lower SWB and PWB than the non-victims (see Table 5.18). Likewise, the cyberbullies experience significantly lower SWB and PWB than the non-bullies (see Table 5.19). As with depression, it is clear that the victim *as well as* the bully experienced lower MWB.

Accordingly, one can conclude that the MWB of this group of adolescents is not optimal and that a relationship does exist between CB and MWB. Their levels of MWB need improvement, especially in the area of SWB. This is thus a matter that parents, schools and the Department of Education should take note of. As mentioned, these findings thus extend the knowledge on the effect CB has on the MWB of victims and bullies in the South African context (see 1.10.1)

Although CB had a moderate effect on the MWB of the participants, clearly other factors that were not addressed in this study could possibly have an effect on their MWB e.g. socio-economic status, race, home situation, academic performance, physical health and other stressors.

6.3.9 Conclusion in relation to pure literature findings: The developing adolescent

Though these findings have not been substantiated by empirical data, they nonetheless contribute to the understanding of the adolescent since there are specific adolescent developmental factors that put adolescents at risk of becoming involved with CB. They are in the phase where they develop sexually and have to decide about their sexual orientation (see 2.3.2.1.1). Some adolescents easily take risks, because of their brain development – the “emotional” and “thinking” systems of the brain are out of balance (see 2.3.2.2.1). Adolescents are generally egocentric and self-conscious (see 2.3.2.2.2). They are in the process of identity formation and might experience role confusion (see 2.3.2.3.1). Their moral reasoning is still developing (see 2.3.2.4.1). On the social developmental front, the relationships they form with the parents (see 2.3.2.4.2), their peers (see 2.3.2.4.3) and their school (see 2.3.2.4.4.) might either be a trigger or a buffer against CB involvement.

The main conclusion here is that even though adolescents are in a phase where they grapple with certain developmental issues, they should be taught on the socialisation and relationship front. Adolescents who are still stuck in the good-boy-good-girl stage of moral development might be more prone to engage in bullying as long as they are not caught (not looking bad) or they look “good” because bullying is accepted in their social circle – “everybody does it”. Parents and teachers should thus assist adolescents with this kind of reasoning. This is discussed further under recommendations for schools (see 6.5.1.1) and parents (see 6.5.1.2).

6.3.10 Conclusion in relation to pure literature findings: Human rights and cyberbullying

Although these findings have not been substantiated by empirical data, they contribute to the understanding of the fact that CB does not only have an impact on the level of depression and the MWB of the victims and the bullies, but CB also violates a person's human rights. Various relevant human rights were identified in the literature review, such as the right to equality, freedom from discrimination, privacy and dignity, as well as the right of the child, freedom of expression, the right to freedom and the security of the person and the right to education (2.2.4.1). These rights are legally protected and enforceable, via avenues such as, the human rights commission, disciplinary procedures at schools and the courts.

In conclusion, the victim and the bully should be made aware that CB infringes on the rights of other persons. Victims should know that there are some legal remedies available to assist them and bullies should know that their actions can bring them in conflict with the law. This aspect is discussed further under recommendations for the adolescent (see 6.5.1.3).

6.4 MOST PROMINENT CONCLUSIONS

From the above conclusions is evident that CB, although a bit less prevalent than traditional bullying in this sample, is a rising concern and that many factors play a role in its continued existence. Consequently, adolescents, teachers, schools, the Department of Education and parents should take note of the following:

- CB is definitely prevalent among this sample group and among South African adolescents.
- CB is not a loose standing problem, as it seems to be tied with traditional bullying. However, the anonymity and unbound audience factors that make CB unique, contribute to the problem.
- Both CB bullies and victims in this sample suffer from depression and they do not experience optimal MWB.
- Extensive, unrestricted and unsupervised use of electronics is a major risk for CB involvement.
- Adolescents need help with socialisation and relationship forming as well as with developing of useful protective strategies when they do come across CB.

The above conclusions clearly show that both the victim and the bully need assistance to combat this CB phenomenon and they need special support with depression and overall MWB. Not only do the adolescents need help, the schools, their teachers and parents need advice as well. Clearly, a **health-promoting school approach** is needed. The WHO (1996, p. 2) defines a health-promoting school (HPS) as:

“...a place where all members of the school community work together to provide students with integrated and positive experiences and structures which promote and protect their health. This includes both the formal and informal curricula in health, the creation of a safe and healthy school environment, the provision of appropriate health services and the involvement of the family and wider community in efforts to promote health.”

The researcher does not imply that the schools that took part in the research do not do health promotion in their schools. The emphasis is on the importance of such an HPS approach for CB prevention and intervention. As this study lies within the field of educational psychology, this HPS approach forms part of **psycho-education**. In the next section recommendations for all the relevant role players are discussed.

6.5 RECOMMENDATIONS

Since an HPS is a school in which all members of the school community work together to promote the health of learners (WHO, 1996), recommendations for the Department of Education, school principals, teachers, parents and the adolescent are presented in this section. Ang (2015) proclaims that schools can be considered as a *social agent* that is the link to both parents and learners, therefore recommendations for the school setting (Department of Education, SGBs, principals, and teachers) are discussed first.

6.5.1.1 Recommendations for the Department of Education, SGBs, principals and teachers

First of all, schools should make sure that their bullying policies are up to date and that they have included CB to a great extent (Batterbee, 2014). Nonetheless, updated policies are not enough to prevent and regulate CB, learners need guidance to become responsible technology users (Shariff & Hoff, 2007). Schools make use of technology to convey the curriculum, and therefore it is of paramount importance that teachers recognise important issues with regard to respectful internet use and that they implement these standards.

UNESCO (2018) recently compiled an ICT Competency Framework for Teachers, advising them, among other things, on the identification and management of internet conduct and safety issues. According to UNESCO (2018), teachers should discuss openly and regularly and develop appropriate CB strategies in collaboration with their students. They should make sure that the learners know what appropriate online behaviour is and how to protect and manage their confidentiality. Lastly, teachers should inform learners on how to act when they are faced with inappropriate cyber behaviour and content. CB and traditional bullying should be topics of open discussion in schools and not a “silent topic” locked up in a school policy. However, schools cannot be solely responsible for the internet usage of adolescents, but schools are seen as a key role player in the prevention of CB (Popovac & Leoschut, 2012).

Adolescents need ample help and guidance with relationship forming and socialisation. According to Nixon (2014), meaningful social relationships with peers can help with the prevention and intervention of CB. Schools can instil the four UNESCO pillars of education throughout life, which are: learning to know, learning to do, learning to live together and learning to be (Delors, 1998). For the purpose of this recommendation, the pillar of “learning to live together”, which entails respect and concern for others, social and interpersonal skills and appreciation of the diversity of the world are highlighted. Learners must be regularly reminded that we need to attempt to understand one another’s history, traditions and spiritual values in order to live well together. We all have a social responsibility. Moreover, they must learn how to deal with inevitable conflicts in an intelligent and peaceful way (Delors, 1998). Adolescents must be trained on how to effectively portray self-control and how to empathise with others (Nixon, 2014). Mylonakou-Keke (2015) conducted a social pedagogical research programme at a school in Greece to deal with bullying and the outcome was very positive. The aim of social pedagogy is to develop a social pedagogical ethos.

According to Mylonakou-Keke (2015, p. 78), social pedagogical ethos at the school is:

“...a philosophy that translates into a way of life and consists of core values and principles, such as love, humility, modesty, solidarity, justice, magnanimousness, self-respect, decency, taking personal responsibility, a deep respect for every person’s dignity and highlighting the uniqueness of every person of any age, acceptance of any form of otherness, emotional interconnection, empathic understanding, honesty, trust, consistency, continuous effort for self-improvement, team spirit,

cooperativeness, selflessness, dedication, diligence, responsibility, democratic principles.”

In environments where these values are not realized, effort is needed to bring about social change. Social change will not come into existence by just talking to learners about the prevalence and the effect of CB, they will have to be part of the prevention and intervention process. Coles (2019) argues from a critical pedagogy perspective that schools should equip learners in such a way that they realise they have the knowledge and the power to change the status quo. Learners must take responsibility and engage in positive, constructive action to bring change. A combination of social and critical pedagogical practice could thus be used as a vehicle to combat CB in South African schools.

Since it is evident that CB has a large effect on the level of depression and the overall MWB of adolescents, schools with the assistance of the Department of Education, should focus on mental health promotion at schools. According to Naidoo and Wills (2016), mental health should be promoted at schools and the importance of well-being should be emphasised. Stigma and denial of mental health problems should be eliminated. The success that Mylonakou-Keke (2015) had with social pedagogy and CB could most probably also be applied to mental health promotion – it will make sure that it is not only a “talked about” topic, but a school ethos. The majority of the participants, the non-involved, the victims and the bullies in this study experienced moderate MWB, meaning that they were neither flourishing nor languishing (Keyes, 2013). Schools should thus make every effort so that more of their learners reach a flourishing state of MWB. The SWB was the lowest among participants. Mental health campaigns at schools should thus focus on assisting adolescents with interpersonal relationships and their position in society – once again the “learning to live together” pillar of UNESCO could be embraced. As the researcher as well as the study leader are both professional mental health providers, they will not forsake the schools that participated in this study without any support. The support that will be provided is discussed further under contributions of the study (see 6.9.2).

6.5.1.2 Recommendations for parents

The difficulty with CB is that most young people are online without any adult supervision and even when they are supervised, they are so sophisticated with electronics use, they know how to sidestep preventative measures (Popovac & Leoschut, 2009). Parents must thus realise that they play a crucial part in the prevention and intervention of CB, since

adolescents regard family social support as a protective factor for CB involvement (Nixon, 2014). Cassidy, Faucher and Jackson (2018) conducted a study where learners were asked what they suppose parents should do to help them with CB. The following suggestions were discussed and would be valuable to all parents: parents should have more open conversations with their teens about CB, not lecturing and judging, but having a discourse on cyber-kindness behaviour. They should educate them about the consequences of negative cyber behaviour for their future by making use of concrete examples. Even more important, parents should model good cyber behaviour because so frequently parent's themselves are guilty of improper cyber behaviour. Parents should aspire to have a good, close relationship with their children and to be involved in their children's lives. Lastly, parents should monitor what their children do online and restrict their access, since abundant access to technology seems to be part of the CB problem. Louw and Louw (2011) provide four guidelines for parents with regard to adolescents and cyberspace habits. The authors advise that parents should regulate and monitor their children's media activities; that they should become knowledgeable about the digital activities their adolescent/s are involved in; that they show interest in their adolescent/s ICT activities and parents should set sensible rules for ICT usage. Parents often neglect to address misbehaviour related to cyber activities, primarily because of their lack of knowledge. They should guide their teenager/s in such a way that their cyberspace usage is balanced and do not become excessive. Popovac and Leoschut (2012) state that parents should not only supervise the use of electronic media, they should *empower* adolescents to keep themselves safe online. Lastly, parents should realise when their child needs individual care to increase their self-control and empathy towards others (Nixon, 2014).

6.5.1.3 Recommendations for the adolescent

Stopbullying.gov (2017) suggests a few principles that adolescents can make use of when they are using the internet to prevent CB: the "mom" principle – if you are not willing to share the photographs/texts you are thinking to share to your peers with your mother, father or caregiver, then do not share. The "forever" principle – assume that your online actions can be there forever. Lastly, the "no privacy" principle – remind yourself that anyone can easily access the information you put online.

Victims of CB must know that they do not have to face this alone, the law is on their side. The South African Human Rights Commission (SAHRC) is an institution that can by law enforce all human rights. Adolescents must be aware of the Promotion of Equality and Prevention of Unfair Discrimination Act of 2000, since they can be protected against

discrimination, and the the Protection from Harassment Act 17 of 2011, since it protects the freedom and security of a person. They must know that CB is seen as a form of harassment and that they can apply at a court for an interim protection order. On school level, bullies can face disciplinary action for both traditional bullying and CB. Cyberbullies must be aware of the fact that they can be charged with either *crimin injuria* or criminal defamation and should therefore be very careful how they approach others online.

Lastly, a *utilitarian* approach for internet use is suggested. Adolescents should strive to become sensible and virtuous online citizens. They must attempt to make judgements online based on previous offline experiences as well as their real emotions and feelings. Technology per se is not good or bad, ultimately the user decides to use it for the better or the worse (Harrison, 2015). Nixon (2014) states that adolescents should take responsibility and self-regulate the time they spend online, since it is a risk factor for CB involvement.

6.6 CONCLUDING REMARKS

In conclusion, most of the CB preventions and interventions fall within the parameters of schools, however, since it should be recognised as a public health issue, more stakeholders should be on board (Spears et al., 2015). CB prevention and intervention and the enhancement of MWB among adolescents could be dealt with through a HPS approach. Consequently, the Department of Education should support principals and schools and teachers should assist parents and vice versa. Wayman (2019) describes the process towards anti-bullying between parents and teachers as a partnership where parents can express their concern about bullying without judgement, but likewise where the school can express their concern about bullying and the parents do not act in denial. Moreover, adolescents should take responsibility and be pro-active, work on their intrapersonal skills and strive for a better state of affairs. Since,

“...when ‘I’ is replaced by ‘we’ even “illness” becomes ‘wellness’.

Scharf

6.7 LIMITATIONS OF THE STUDY

The researcher remained aware throughout the study that there may be drawbacks that could hamper the study. The following limitations ought to be mentioned:

- The fact that it was initially an online survey design made it difficult to reach enough participants at first. Adolescents are not likely use their personal internet data to take part in research. It is definitely something that should be considered when researchers want to include adolescents in a study. This could be seen as both a limitation and a recommendation.
- The sample was an availability sample and not representative of the Matlosana district, therefore generalisations to the rest of South Africa could not be made.
- Due to time and money constraints, only Grade 8 to 11 learners were participants in this study. This research could be expanded to include younger and older learners or students who may be affected by cyber bullying too.
- The distribution of the different grades (8, 9, 10 and 11) were not even. Conclusions about age differences and CB could thus not be made.
- It seems that the survey was too long for some of the participants, since many did not fill in the last section, the MHQ questionnaire. Regardless, the Cronbach alphas were still sufficient (see 4.4.3).

6.8 SUGGESTIONS FOR FUTURE RESEARCH

Gained from the most prominent conclusions of this study, the following suggestions for future research are presented:

- The relationship between parent involvement, school climate and CB involvement could be explored.
- The risk factor of spending too much time online and CB involvement could be explored.
- Useful protective behaviours to combat CB could be investigated further.
- A mixed method design might have been useful to obtain a more in-depth understanding of demographic differences with regard to CB involvement. In-depth individual interviews could explore reasons behind CB by having interviews with participants who are willing to state that they have bullied someone else previously.

- In relation to the previous two points – most studies on CB have been quantitative, only 7% have been qualitative (Smith, 2019). It might thus be useful to get in-depth answers from learners in order to really understand this phenomenon better.
- Teachers who are conducting research could apply the social critical pedagogy as part of action research in order to bring about social change and taking responsibility among adolescents.
- Longitudinal research on the long-term MWB effect of CB could be done.
- The relationship between CB and anxiety could be explored.

6.9 CONTRIBUTIONS OF THE STUDY

6.9.1 Body of scholarship contribution

Two main contributions to the existing literature were made. Firstly, this study contributed to the knowledge of the prevalence, nature and effects of CB on the MWB of adolescents (victims and bullies). Secondly, this research attempted to extend the knowledge of relationships between CB and MWB and CB and depression. The researcher and study leaders have already drafted two academic articles and plan to present the findings at a suitable national conference.

6.9.2 Contribution to the community (schools, parents, adolescents and students)

The researcher aims to go back to the schools that participated in this study and to aid them with a psycho-educational and awareness campaign as discussed in Chapter 1. The researcher will ask the principals if she could present the findings of the study at assembly to the learners and teachers and at parent meetings by means of a PowerPoint presentation. Parent meetings will hopefully add value since the parents are an important key to successfully combat this problem. The schools will also be provided with flyers on depression to hand out to their learners (see Addendum J for the flyer and permission from SADAG president to distribute the flyer). Although this is not regarded as a remedy, it is an attempt to raise awareness on the topic and hopefully highlight the need for mental health promotion in these schools.

6.10 SUMMARY

This final chapter provided the main conclusions of the study and highlighted matters of concern for the relevant role players. Recommendations were made to the role players and the limitations of the study were outlined. The researcher suggested future research areas and discussed the contributions of the study.

6.11 QUOTES THAT INSPIRED ME

“We focus so much on our differences, and that is creating, I think, a lot of chaos and negativity and bullying in the world. And I think if everybody focused on what we all have in common – which is – we all want to be happy”.

Ellen DeGeneres

“Watch your thoughts, they become words. Watch your words, they become actions. Watch your actions, they become habits. Watch your habits, they become character. Watch your character for it becomes your destiny”.

Patrick Overton

“There’s no room for hate and violence in this world. We must learn to be more kind, compassionate, empathetic, and sympathetic to humanity.”

Germany Ken

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LIST OF ADDENDA

Addendum A: Electronic version of survey

Addendum B: Printed version of survey

Addendum C: Permission from the Faculty of Education to conduct research

Addendum D: Permission from HREC to conduct research

Addendum E: Ministerial consent to conduct research

Addendum F: Permission from the Department of Education to conduct research

Addendum G: Permission from school principals to conduct research

Addendum H: Permission from parents

Addendum I: Adolescent assent

Addendum J: SADAG Depression flyer and permission to distribute the flyer

Addendum K: First and second amendment to sampling procedure

Addendum L: Reminder of research participation

Addendum M: Permission to use Daphne Questionnaire

Addendum N: Declaration of Language Editing

Addendum A: Electronic version of survey

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Cyberbullying and Mental Health Survey

Cyberbullying and Mental Health Survey

Dear learner

You are invited to take part in a research study that forms part of my Master's degree in Educational Psychology.

- * Your participation is entirely voluntary and you are free to say no. If you say no, this will not affect you negatively in any way whatsoever.
- * You are also free to withdraw from the study at any point, even if you do agree that you take part now.
- * This survey is confidential and anonymous.
- * If you do not want to answer some of the questions, then leave them out. We would be grateful if you could answer as many questions as possible.
- * Please answer the following questions as truthfully as you can.
- * By completing this survey you hereby give consent to participate.

Warm regards,

Elmaré Mong

*Required

You're invited...

TITLE OF THE RESEARCH STUDY: Cyberbullying and its effects on the mental well-being of adolescents

ETHICS REFERENCE NUMBER: NWU-00009-17-S1

PRINCIPAL INVESTIGATOR: Dr Doret Kirsten, Study supervisor / Dr Annamagriet De Wet, Co-supervisor

POST GRADUATE STUDENT: Ms Elmaré Mong, MEd student

ADDRESS: North-West University, Faculty of Education Sciences, C6, Room 234, Potchefstroom campus

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (**NWU-00009-17-S1**) and will be conducted according to the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (DoH, 2015) and other international ethical guidelines applicable to this study. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

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Cyberbullying and Mental Health Survey

NWU-Faculty of Education

Section 2: If you want to be in the lucky draw, fill in your cell phone number, if not, just continue.

1. Number:

The survey has different sections. Please complete all sections.

Section 1 Daphne Cyberbullying Questionnaire

Section 2: Patient Health Questionnaire

Section 3: Mental Health Continuum

Section 1: DAPHNE Cyberbullying Questionnaire

This section will give us more information ABOUT YOU

2. 1. Gender identification *

Tick all that apply.

- Male
 Female
 Other

3. 2.1 Age at last birthday *

4. 2.2 Current grade *

Tick all that apply.

- Grade 8
 Grade 9
 Grade 10
 Grade 11

5. 3. Do you have a disability? *

Tick all that apply.

- No
 Yes

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6. If YES, mention the type of disability

7. 4. Sexual orientation **Tick all that apply.*

- Heterosexual
- Gay
- Lesbian
- Asexual
- Bisexual

Section 1: DAPHNE How you feel about your school

This section will tell us how you feel about your school.

For each question choose the ONE answer that best describes HOW YOU FEEL ABOUT YOUR SCHOOL.

There are no right or wrong answers- just give your honest opinion.

8. 5. Do you feel that your school is a happy and caring school? **Tick all that apply.*

- Not at all
- A little
- Moderate
- Very much

9. 6. Do you feel safe at school? **Tick all that apply.*

- Not at all
- A little
- Moderate
- Very much

10. 7. Does your school care for and support pupils who are worried, sad or upset? **Tick all that apply.*

- Not at all
- A little
- Moderate
- Very much

11. 8. Does your school seek and listen to the opinions of pupils? **Tick all that apply.*

- Not at all
- A little
- Moderate
- Very much

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12. 9. Do you have good relationships with most of the teachers in your school? **Tick all that apply.*

- Not at all
 A little
 Moderate
 Very much

13. 10. Do you trust most adults in your school? **Tick all that apply.*

- Not at all
 A little
 Moderate
 Very much

14. 11. Do you have good relationships with the other learners in your class? **Tick all that apply.*

- Not at all
 A little
 Moderate
 Very much

15. 12. Do you have good relationships with the other learners in your school? **Tick all that apply.*

- Not at all
 A little
 Moderate
 Very much

16. 13. Are you aware of a bullying policy at your school? **Tick all that apply.*

- Yes
 No
 I don't know

17. 14. If YES, does that policy include dealing with cyberbullying incidents? **Tick all that apply.*

- Yes
 No
 I don't know

Section 1: DAPHNE Use of Electronics

In this section you will tell us about the kinds of electronics you use and how you use it.

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18. 15. Do you have a mobile phone? **Tick all that apply.*

- Yes
 No

19. 16. Do you have any computers linked to the internet at your home? (you may select several answers) **Tick all that apply.*

- No we don't have a computer linked to the internet in our home
 Yes, in my room
 Yes in the living room
 Yes, elsewhere.

20. 17. Do you have access to the internet outside your home? **Tick all that apply.*

- No
 Yes

Untitled section**21. 18. How much time do you spend per day using your technological devices (cellphone or the internet)? ****Tick all that apply.*

- Less than one hour per day
 One to two hours per day
 two to three hours per day
 more than three hours per day

22. 19.1 Parental supervision: are your parents aware of what you do on internet? **Tick all that apply.*

- Yes
 No

23. 19.2 Have your parents given you rules about accessing the internet and websites you can visit? **Tick all that apply.*

- Yes
 No

24. 19.3 Have your parents ever spoken to you how to protect yourself when you are online? **Tick all that apply.*

- Yes
 No

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25. **19.4 Do you have an open communication relationship with your parents? ***

Tick all that apply.

- Yes
 No
 I don't know

Section 1: DAPHNE Experiences of Traditional and Cyberbullying

The next questions are about traditional bullying (direct and indirect) & through cyberbullying (mobile phone use and the internet).

If you are unsure about the definitions of traditional and cyberbullying, please look at the attached pamphlet before you answer the questions.

Information sheet about traditional bullying and cyberbullying

Traditional bullying is behaviour carried out by an individual, or a group, which is repeated over time in order to hurt, threaten or frighten another individual with the intention to cause distress. It is different from other aggressive behaviour because it involves an imbalance of power which leaves the victim defenceless. Traditional bullying occurs in **physical space**.

Direct forms of bullying include:

- hitting, tripping up, taking belongings
- name calling and taunting (perhaps about race, gender, sexuality or disability) to someone in person, face to face

Indirect forms of bullying include:

- telling lies or spreading false rumours about someone behind their back
- sending mean notes to try and make someone disliked
- excluding someone from a social group on purpose

Cyberbullying is a new form of bullying which involves the use of mobile phones (texts, calls, video clips) or the internet (e-mail, chat rooms, websites) or other forms of information and communication technology to deliberately harass, threaten, or intimidate someone. Cyberbullying occurs in **cyberspace**.

Examples of bullying using a mobile phone are:

- sending or receiving upsetting phone calls (e.g. malicious prank calls)
- taking, sending or receiving unpleasant photos and/or videos using mobile phones (e.g. happy slapping)
- sending or receiving abusive text messages by mobile phone (e.g. WhatsApp, BBM, Mxit, Viber, Snapchat, etc).

Examples of bullying through the internet are:

- Malicious or threatening emails directly to you, or about you to others
- Intimidation or abuse when participating in chat rooms
- Websites where secret or personal details are revealed in an abusive way or where nasty or unpleasant comments are being made. Examples of websites are:
 - ❖ Social networking websites (e.g. Facebook, Instagram, Twitter etc)
 - ❖ File sharing websites (YouTube, flickr etc)
 - ❖ Blogs

Information retrieved from the Daphne questionnaire

20. Have YOU BEEN BULLIED in the last two months by one of the following:

26. 20.1 Cyberbullying (cell phone)

Tick all that apply.

- Yes
- No

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27. 20.2 Cyberbullying (internet)

Tick all that apply.

- Yes
- No

28. 20.3 Traditional bullying (direct)

Tick all that apply.

- Yes
- No

29. 20.4 Traditional bullying (indirect)

Tick all that apply.

- Yes
- No

30. 21 How often have you been bullied in the last two months? Click where it is applicable to you

Tick all that apply.

	COLUMN A Cyberbullying (mobile phone)	COLUMN B Cyberbullying (internet)	COLUMN C Traditional bullying (direct)	COLUMN D Traditional bullying (indirect)
It has only happened once or twice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Two or three times a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
About once a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Several times a week or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

31. 22. If you have been bullied in the last two months, how long did it last? Click where it is applicable to you

Tick all that apply.

	COLUMN A Cyberbullying (mobile phone)	COLUMN B Cyberbullying (internet)	COLUMN C Traditional bullying (direct)	COLUMN D Traditional bullying (indirect)
It lasted one or two weeks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It lasted about a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It has lasted about six months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It has lasted about a year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It has gone on for several years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Have you BULLIED someone else in the last two months by one of the following?

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32. 23.1 Cyberbullying (cell phone)

Tick all that apply.

- Yes
- No

33. 23.2 Cyberbullying (internet)

Tick all that apply.

- Yes
- No

34. 23.3 Traditional bullying (direct)

Tick all that apply.

- Yes
- No

35. 23.4 Traditional bullying (indirect)

Tick all that apply.

- Yes
- No

36. 24. How often have you bullied anyone else in the last two months? Click where it is applicable to you

Tick all that apply.

	COLUMN A Cyberbullying (mobile phone)	COLUMN B Cyberbullying (internet)	COLUMN C Traditional bullying (direct)	COLUMN D Traditional bullying (indirect)
It has only happened once or twice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Two or three times a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
About once a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Several times a week or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 1: DAPHNE Cyberbullying

The following questions are only applicable to Cyberbullying

37. 25. If you have been bullied in the last two months and you know who the person is, can you tell us which class they are in? (For this question you can select several answers)

Tick all that apply.

	Cyberbullying (mobile phone)	Cyberbullying (internet)
In my class	<input type="checkbox"/>	<input type="checkbox"/>
In a different class but in the same year	<input type="checkbox"/>	<input type="checkbox"/>
In another year (older or younger)	<input type="checkbox"/>	<input type="checkbox"/>
I know them but they are not in my school	<input type="checkbox"/>	<input type="checkbox"/>
I don't know who bullied me	<input type="checkbox"/>	<input type="checkbox"/>

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38. **26. If you have been bullied in the last two months and you know who the person is, can you tell us if they are a girl or boy?**

Tick all that apply.

	Cyberbullying (mobile phone)	Cyberbullying (internet)
Mainly by one girl	<input type="checkbox"/>	<input type="checkbox"/>
By several girls	<input type="checkbox"/>	<input type="checkbox"/>
Mainly by one boy	<input type="checkbox"/>	<input type="checkbox"/>
By several boys	<input type="checkbox"/>	<input type="checkbox"/>
By both boys and girls	<input type="checkbox"/>	<input type="checkbox"/>
I don't know who bullied me	<input type="checkbox"/>	<input type="checkbox"/>

39. **27.a. How did they bully you in the last two months via cell phone? (For this question you can select several answers)**

Tick all that apply.

- Using text messages
- Using multimedia texts (multimedia, photos, videos,)
- Using phone calls

40. **27.b How did they bully you in the last two months via the internet? (For this question you can select several answers)**

Tick all that apply.

- Through emails
- Through chat rooms
- Through social networking websites (e.g. Facebook, Instagram, Twitter etc.)
- Through file sharing websites (YouTube, flickr etc.)
- Through a blog

41. **28. How did you feel when someone bullied you (For this question you can select several answers)**

Tick all that apply.

	Cyberbullying (mobile phone)	Cyberbullying (internet)
Embarrassed	<input type="checkbox"/>	<input type="checkbox"/>
Upset	<input type="checkbox"/>	<input type="checkbox"/>
Afraid and scared	<input type="checkbox"/>	<input type="checkbox"/>
Alone and isolated	<input type="checkbox"/>	<input type="checkbox"/>
Defenceless, no one can do anything about it	<input type="checkbox"/>	<input type="checkbox"/>
Depressed	<input type="checkbox"/>	<input type="checkbox"/>
Stressed	<input type="checkbox"/>	<input type="checkbox"/>
It doesn't bother me	<input type="checkbox"/>	<input type="checkbox"/>
Angry	<input type="checkbox"/>	<input type="checkbox"/>

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42. 29.a What have you done if someone bullied you in the last two months on your cell phone? (For this question you can select several answers)

Tick all that apply.

- I felt helpless
- I ignored what was happening, hoping it would stop
- I turned my mobile off
- I told a friend
- I told a teacher
- I told a parent/carer
- I asked the person directly to stop texting/phoning me
- I blocked the texts/phone calls
- I changed my mobile phone number
- I reported the bullying to the mobile phone company and got them to trace the person bullying me
- I tried to do to them what they had done to me
- Other (Please type here)

43. 29.b What have you done if someone bullied you in the last two months via the internet (For this question you can select several answers)

Tick all that apply.

- I felt helpless
- I ignored what was happening, hoping it would stop
- I stopped using the internet
- I told a friend
- I told a teacher
- I told a parent/carer
- I asked the person directly to stop bullying me on the internet
- I blocked the person who was bullying me
- I contacted the internet service provider and reported the bully
- I tried to do to them what they had done to me
- Other (Please type here)



44. If you feel that you need help, please fill in your cell phone number here and we will make sure that you are referred to a counselor/receive feedback.

12/1/2019

Cyberbullying and Mental Health Survey

Section 2: Patient Health Questionnaire (PHQ)

Over the last 2 weeks, how often have you been bothered by any of the following problems?

45. 1. Little interest/pleasure in doing things (over the last 2 weeks?)*Mark only one oval.*

- not at all
 several days
 more than half the days
 nearly every day

46. 2. Feeling down/depressed/hopeless (over the last 2 weeks?)*Mark only one oval.*

- not at all
 several days
 more than half the days
 nearly every day

47. 3. Trouble falling or staying asleep/ OR sleeping too much (over the last 2 weeks?)*Mark only one oval.*

- not at all
 several days
 more than half the days
 nearly every day

48. 4. Feeling tired/ having little energy (over the last 2 weeks?)*Mark only one oval.*

- not at all
 several days
 more than half the days
 nearly every day

49. 5. Poor appetite OR overeating (over the last 2 weeks?)*Mark only one oval.*

- not at all
 several days
 more than half the days
 nearly every day

50. 6. Feeling bad about yourself OR that you are a failure/ that you have let yourself or your family down (over the last 2 weeks?)*Mark only one oval.*

- not at all
 several days
 more than half the days
 nearly every day

12/1/2019

Cyberbullying and Mental Health Survey

51. **7. Trouble concentrating on things, such as reading the newspaper/ watching television (over the last 2 weeks?)**

Mark only one oval.

- not at all
 several days
 more than half the days
 nearly every day

52. **8. Moving or speaking so slowly that other people could have noticed OR being so fidgety or restless that you have been moving around a lot more than usual (over the last 2 weeks?)**

Mark only one oval.

- not at all
 several days
 more than half the days
 nearly every day

53. **9. Thoughts that you would be better off dead/ of hurting yourself in some way (over the last 2 weeks?)**

Mark only one oval.

- not at all
 several days
 more than half the days
 nearly every day

54. **10. Thoughts that you seriously want to hurt or kill someone else (over the last 2 weeks?)**

Mark only one oval.

- not at all
 several days
 more than half the days
 nearly every day

55. **11. If you checked off any problems in 1-10, how difficult have these problems made it for you to do your work (school work), take care of things at home or get along with other people?**

Mark only one oval.

- not difficult at all
 somewhat difficult
 very difficult
 extremely difficult

12/1/2019

Cyberbullying and Mental Health Survey



56. If you feel that you need help, please fill in your cell phone number here and we will make sure that you are referred to a counselor/receive feedback.
-

Section 3: MENTAL HEALTH CONTINUUM (MHC-SF)

57. 1. In the past month, how often did you feel happy?

Mark only one oval.

- never
 once or twice
 about once a week
 2 or 3 times a week
 almost every day
 every day

58. 2. In the past month, how often did you feel interested in life?

Mark only one oval.

- never
 once or twice
 about once a week
 2 or 3 times a week
 almost every day
 every day

59. 3. In the past month, how often did you feel satisfied?

Mark only one oval.

- never
 once or twice
 about once a week
 2 or 3 times a week
 almost every day
 every day

12/1/2019

Cyberbullying and Mental Health Survey

60. **4. In the past month, how often did you feel that you had something important to contribute to society?**

Mark only one oval.

- never
- once or twice
- about once a week
- 2 or 3 times a week
- almost every day
- every day

61. **5. In the past month, how often did you feel that you belonged to a community (like a social group, your neighborhood, or city)?**

Mark only one oval.

- never
- once or twice
- about once a week
- 2 or 3 times a week
- almost every day
- every day

62. **6. In the past month, how often did you feel that our society is becoming a better place for people?**

Mark only one oval.

- never
- once or twice
- about once a week
- 2 or 3 times a week
- almost every day
- every day

63. **7. In the past month, how often did you feel that people are basically good?**

Mark only one oval.

- never
- once or twice
- about once a week
- 2 or 3 times a week
- almost every day
- every day

12/1/2019

Cyberbullying and Mental Health Survey

64. **8. In the past month, how often did you feel that the way our society works makes sense to you?**

Mark only one oval.

- never
- once or twice
- about once a week
- 2 or 3 times a week
- almost every day
- every day

65. **9. In the past month, how often did you feel that you liked most parts of your personality?**

Mark only one oval.

- never
- once or twice
- about once a week
- 2 or 3 times a week
- almost every day
- every day

66. **10. In the past month, how often did you feel good at managing the responsibilities of your daily life?**

Mark only one oval.

- never
- once or twice
- about once a week
- 2 or 3 times a week
- almost every day
- every day

67. **11. In the past month, how often did you feel that you had warm and trusting relationships with others?**

Mark only one oval.

- never
- once or twice
- about once a week
- 2 or 3 times a week
- almost every day
- every day

12/1/2019

Cyberbullying and Mental Health Survey

68. **12. In the past month, how often did you feel that you have experiences that challenge you to grow and become a better person?**

Mark only one oval.

- never
 once or twice
 about once a week
 2 or 3 times a week
 almost every day
 every day

69. **13. In the past month, how often did you feel confident to think or express your own ideas and opinions?**

Mark only one oval.

- never
 once or twice
 about once a week
 2 or 3 times a week
 almost every day
 every day

70. **14. In the past month, how often did you feel that your life has a sense of direction or meaning to it?**

Mark only one oval.

- never
 once or twice
 about once a week
 2 or 3 times a week
 almost every day
 every day



71. **If you feel that you feel that you need help, please fill in your cell phone number here and we will make sure that you are referred to a counselor/receive feedback.**

Thank you for participating!!! This is the end of the survey.

12/1/2019

Cyberbullying and Mental Health Survey



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 Google Forms

Addendum B: Printed version of survey

DAPHNE Cyberbullying Questionnaire (DCBQ)

This questionnaire is confidential. It is also anonymous, so please do not put your name on it. If you do not want to answer any questions, then leave them out, but we would be most grateful if you could answer as fully as possible. You do not have to complete the questionnaires if you don't want to and you can withdraw your data at any time. Please answer the following questions as truthfully as you can.

Section 1: About you

1 Gender identification	
1 <input type="checkbox"/> Male	2 <input type="checkbox"/> Female 3 <input type="checkbox"/> Other
2.1 Age at last birthday	
<input type="text"/>	<input type="text"/>
2.2 Current grade	
1 <input type="checkbox"/> Grade 8	2 <input type="checkbox"/> Grade 9 3 <input type="checkbox"/> Grade 10 3 <input type="checkbox"/> Grade 11
3 Do you have a disability?	
1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No
If yes, please mention the type of disability (ONLY if you are comfortable)	

4 Sexual orientation

1 <input type="checkbox"/> Heterosexual	2 <input type="checkbox"/> Gay	3 <input type="checkbox"/> Lesbian	4 <input type="checkbox"/> Asexual	5 <input type="checkbox"/> Bisexual
---	--------------------------------	------------------------------------	------------------------------------	-------------------------------------

Section 2: How you feel about your school

This section will tell us how you feel about your school. For each question, choose the **one** answer that best describes **how you feel about your school**. There are no right or wrong answers - just give your honest opinion.

Rate your answers as follow:

	Not at all	A little	Moderate	Very much
5 Do you feel that your school is a happy and caring school?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
6 Do you feel safe at school?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
7 Does your school care for and support pupils who are worried, sad or upset?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
8 Does your school seek and listen to the opinions of pupils?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
9 Do you have good relationships with most of the teachers in your school?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
10 Do you trust most adults in your school?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
11 Do you have good relationships with the other learners in your class?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
12 Do you have good relationships with the other learners in your school?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

13 Are you aware of a bullying policy at your school?	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No
14 If YES , does that policy include dealing with cyberbullying incidents?	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No

Section 3: Use of technologies

15 Do you have a mobile phone?	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No		
16 Do you have any computers linked to the internet in your home? (For this question you can cross several answers)	16.1 <input type="checkbox"/> No, we don't have a computer linked to the internet in our home	16.2 <input type="checkbox"/> Yes, in my room	16.3 <input type="checkbox"/> Yes, in the living room	16.4 <input type="checkbox"/> Yes, elsewhere
17 Do you have access to the internet outside your home?	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No		
18 How much time per day do you use technological devices (cellphone and or internet)?	1 <input type="checkbox"/> Less than one hour per day	2 <input type="checkbox"/> One to two hours per day	3 <input type="checkbox"/> Two to three hours per day	4 <input type="checkbox"/> More than three hours per day
19 Parental supervision				
19.1 Are your parents aware of what you do on the internet?	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No		
19.2 Have your parents given you rules about accessing the internet eg times that you can access the internet and websites that you can visit?	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No		
19.3 Have your parents/caregivers ever spoken to you about how to protect yourself when you are online?	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No		
19.4 Do you have an open communication relationship with your parents/care givers?	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No	3 <input type="checkbox"/> I do not know	

Question 19 derived from Youth Internet Survey (Zulu & Tustin, 2014)

Section 4: Experiences of traditional and cyberbullying

The next questions are about traditional bullying (direct and indirect) & through cyberbullying (mobile phone use and the internet). If you are unsure about the definitions of traditional and cyberbullying, please look at the attached pamphlet before you answer the questions.

Question	COLUMN A		COLUMN B		COLUMN C		COLUMN D			
	Cyberbullying (mobile phone)		Cyberbullying (internet)		Traditional bullying (direct)		Traditional bullying (indirect)			
20 Have you been bullied in the last two months?	1 <input type="checkbox"/> YES	2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES	2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES	2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES	2 <input type="checkbox"/> NO		
<ul style="list-style-type: none"> If you have answered YES you have experienced cyberbullying through mobile phone use, fill in question 21 & 22 of COLUMN A. If you have answered YES you have experienced cyberbullying through the internet, fill in question 21 & 22 of COLUMN B. If you have answered YES you have experienced traditional bullying (direct), fill in question 21 & 22 of COLUMN C. If you have answered YES you have experienced traditional bullying (indirect), fill in question 21 & 22 of COLUMN D. YOU CAN MARK MORE THAN ONE COLUMN (according to your experiences) If you have said NO in ALL 4 columns, move to question 23 										
Question	COLUMN A		COLUMN B		COLUMN C		COLUMN D			
	Cyberbullying (mobile phone)		Cyberbullying (internet)		Traditional bullying (direct)		Traditional bullying (indirect)			
21 How often have you been bullied in the last two months? (Cross only one answer)	1 <input type="checkbox"/> It has only happened once or twice	2 <input type="checkbox"/> Two or three times a month	3 <input type="checkbox"/> About once a week	4 <input type="checkbox"/> Several times a week or more	1 <input type="checkbox"/> It has only happened once or twice	2 <input type="checkbox"/> Two or three times a month	3 <input type="checkbox"/> About once a week	4 <input type="checkbox"/> Several times a week or more		
22 If you have been bullied in the last two months, how long did it last? (Cross only one answer)	1 <input type="checkbox"/> It lasted one or two weeks	2 <input type="checkbox"/> It lasted about a month	3 <input type="checkbox"/> It has lasted about six months	4 <input type="checkbox"/> It has lasted about a year	5 <input type="checkbox"/> It has gone on for several years	1 <input type="checkbox"/> It lasted one or two weeks	2 <input type="checkbox"/> It lasted about a month	3 <input type="checkbox"/> It has lasted about six months	4 <input type="checkbox"/> It has lasted about a year	5 <input type="checkbox"/> It has gone on for several years

	COLUMN A	COLUMN B	COLUMN C	COLUMN D
Question 23 Have you bullied someone else in the last two months?	Cyberbullying (Mobile phone) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	Cyberbullying (Internet) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	Traditional bullying (direct) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	Traditional bullying (indirect) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO
<ul style="list-style-type: none"> • If you have answered YES you have bullied someone through mobile phone use, fill in question 24 & 25 of COLUMN A. • If you have answered YES you have bullied someone through the internet, fill in question 24 & 25 of COLUMN B. • If you have answered YES you have bullied someone through traditional bullying (direct), fill in question 24 & 25 of COLUMN C. • If you have answered YES you have bullied someone through traditional bullying (indirect), fill in question 24 & 25 of COLUMN D. • YOU CAN MARK MORE THAN ONE COLUMN (according to your experiences) • If you have said NO in ALL 4 columns, move to question 26 				
Question 24 How often have you bullied anyone else in the last two months? (Cross only one answer)	Cyberbullying (Mobile phone) 1 <input type="checkbox"/> It has only happened once or twice 2 <input type="checkbox"/> Two or three times a month 3 <input type="checkbox"/> About once a week 4 <input type="checkbox"/> Several times a week or more	Cyberbullying (Internet) 1 <input type="checkbox"/> It has only happened once or twice 2 <input type="checkbox"/> Two or three times a month 3 <input type="checkbox"/> About once a week 4 <input type="checkbox"/> Several times a week or more	Traditional bullying (direct) 1 <input type="checkbox"/> It has only happened once or twice 2 <input type="checkbox"/> Two or three times a month 3 <input type="checkbox"/> About once a week 4 <input type="checkbox"/> Several times a week or more	Traditional bullying (indirect) 1 <input type="checkbox"/> It has only happened once or twice 2 <input type="checkbox"/> Two or three times a month 3 <input type="checkbox"/> About once a week 4 <input type="checkbox"/> Several times a week or more

Section 5: The following questions are only applicable to cyberbullying

- If you have answered **YES** in question 20 that you have **been bullied** in the last two months through **mobile phone use**, fill in the rest of **COLUMN A**.
- If you have answered **YES** in question 20 that you have **been bullied** in the last two months through **the internet**, fill in the rest of **COLUMN B**.
- If you have answered **NO** in question 20 to both cyberbullying through **mobile phones and the internet**, move to the **SECTION 6**

Question	Column A		Column B	
	Cyberbullying (Mobile)	Cyberbullying (Internet)		
25 If you have been bullied in the last two months and you know who the person is, can you tell us which class they are in? (For this question you can cross several answers)	25.1 <input type="checkbox"/> In my class	25.1 <input type="checkbox"/> In my class		
	25.2 <input type="checkbox"/> In a different class but in the same year	25.2 <input type="checkbox"/> In a different class but in the same year		
	25.3 <input type="checkbox"/> In another year (older or younger)	25.3 <input type="checkbox"/> In another year (older or younger)		
	25.4 <input type="checkbox"/> I know them but they are not in my school	25.4 <input type="checkbox"/> I know them but they are not in my school		
	25.5 <input type="checkbox"/> I don't know who bullied me	25.5 <input type="checkbox"/> I don't know who bullied me		
26 If you have been bullied in the last two months and you know who the person is, can you tell us if they are a girl or boy? (Cross only one answer)	1 <input type="checkbox"/> Mainly by one girl	1 <input type="checkbox"/> Mainly by one girl		
	2 <input type="checkbox"/> By several girls	2 <input type="checkbox"/> By several girls		
	3 <input type="checkbox"/> Mainly by one boy	3 <input type="checkbox"/> Mainly by one boy		
	4 <input type="checkbox"/> By several boys	4 <input type="checkbox"/> By several boys		
	5 <input type="checkbox"/> By both boys and girls	5 <input type="checkbox"/> By both boys and girls		
	6 <input type="checkbox"/> I don't know who bullied me	6 <input type="checkbox"/> I don't know who bullied me		
27 How did they bully you in the last two months? (For this question you can cross several answers)	27.1 <input type="checkbox"/> Using text messages	27.1 <input type="checkbox"/> Through emails		
	27.2 <input type="checkbox"/> Using multimedia texts (multimedia, photos, videos,)	27.2 <input type="checkbox"/> Through chat rooms		
	27.3 <input type="checkbox"/> Using phone calls	27.3 <input type="checkbox"/> Through social networking websites (e.g. Facebook, Instagram, Twitter etc.)		
	27.4 <input type="checkbox"/> In another way	27.4 <input type="checkbox"/> Through file sharing websites (YouTube, flickr etc.)		
		27.5 <input type="checkbox"/> Through a blog		
28 How did you feel when someone bullied you (For this question you can cross several answers)	28.1 <input type="checkbox"/> Embarrassed	28.1 <input type="checkbox"/> Embarrassed		
	28.2 <input type="checkbox"/> Upset	28.2 <input type="checkbox"/> Upset		
	28.3 <input type="checkbox"/> Afraid and scared	28.3 <input type="checkbox"/> Afraid and scared		
	28.4 <input type="checkbox"/> Alone and isolated	28.4 <input type="checkbox"/> Alone and isolated		
	28.5 <input type="checkbox"/> Defenceless, no one can do anything about it	28.5 <input type="checkbox"/> Defenceless, no one can do anything about it		
	28.6 <input type="checkbox"/> Depressed	28.6 <input type="checkbox"/> Depressed		
	28.7 <input type="checkbox"/> Stressed	28.7 <input type="checkbox"/> Stressed		
	28.8 <input type="checkbox"/> It doesn't bother me	28.8 <input type="checkbox"/> It doesn't bother me		
	28.9 <input type="checkbox"/> Angry	28.9 <input type="checkbox"/> Angry		
	28.10 <input type="checkbox"/> Other	28.10 <input type="checkbox"/> Other		

<p>29 What have you done if someone bullied you in the last two months? (For this question you can cross several answers)</p>	<p>29.1 <input type="checkbox"/> I felt helpless 29.2 <input type="checkbox"/> I ignored what was happening, hoping it would stop 29.3 <input type="checkbox"/> I turned my mobile off 29.4 <input type="checkbox"/> I told a friend 29.5 <input type="checkbox"/> I told a teacher 29.6 <input type="checkbox"/> I told a parent/carer 29.7 <input type="checkbox"/> I asked the person directly to stop texting/phonning me 29.8 <input type="checkbox"/> I blocked the texts/phone calls 29.9 <input type="checkbox"/> I changed my mobile phone number 29.10 <input type="checkbox"/> I reported the bullying to the mobile phone company and got them to trace the person bullying me 29.11 <input type="checkbox"/> I tried to do to them what they had done to me 29.12 <input type="checkbox"/> Other</p>	<p>29.1 <input type="checkbox"/> I felt helpless 29.2 <input type="checkbox"/> I ignored what was happening, hoping it would stop 29.3 <input type="checkbox"/> I stopped using the internet 29.4 <input type="checkbox"/> I told a friend 29.5 <input type="checkbox"/> I told a teacher 29.6 <input type="checkbox"/> I told a parent/carer 29.7 <input type="checkbox"/> I asked the person directly to stop bullying me on the internet 29.8 <input type="checkbox"/> I blocked the person who was bullying me 29.9 <input type="checkbox"/> I contacted the internet service provider and reported the bully 29.10 <input type="checkbox"/> I tried to do to them what they had done to me 29.11 <input type="checkbox"/> Other</p>
---	--	--

REQUESTING HELP:

If you feel that you need help, please fill in your cell phone number here and we will make sure that you are referred to a counsellor/receive feedback.

Cell phone number _____

PHQ-9

Kroenke, Spitzer & Williams (2001)

Over the last 2 weeks, how often have you been bothered by any of the following problems?	not at all	several days	more than half the days	nearly every day
1. Little interest/pleasure in doing things	0	1	2	3
2. Feeling down/depressed/hopeless.	0	1	2	3
3. Trouble falling or staying asleep/ <i>OR</i> sleeping too much	0	1	2	3
4. Feeling tired/ having little energy	0	1	2	3
5. Poor appetite <i>OR</i> overeating	0	1	2	3
6. Feeling bad about yourself <i>OR</i> that you are a failure/ that you have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper/ watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed <i>OR</i> being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead/ of hurting yourself in some way	0	1	2	3
*10. Thoughts that you seriously want to hurt or kill someone else	0	1	2	3
If you checked off any problems, how difficult have these problems made it for you to do your work (school work), take care of things at home or get along with other people?	not difficult at all <input type="checkbox"/>	somewhat difficult <input type="checkbox"/>	very difficult <input type="checkbox"/>	extremely difficult <input type="checkbox"/>

*10 Preventative measure- not part of PHQ

REQUESTING HELP:

If you feel that you need help, please fill in your cell phone number here and we will make sure that you are referred to a counsellor/receive feedback.

Cell phone number _____

MENTAL HEALTH CONTINUUM (MHC-SF)

Keyes (2006)

Please answer the following questions about how you have been feeling in the past month. I will ask you each time if it was never, once or twice, about once a week, 2 or 3 times a week, almost every day, or every day.

In the past month, how often did you feel ...	Never	once or twice	about once a week	2 or 3 times a week	almost every day	every day
	0	1	2	3	4	5
1. Happy						
2. Interested in life						
3. Satisfied						
4. That you had something important to contribute to society						
5. That you belonged to a community (like a social group, your neighborhood, or city)						
6. That our society is becoming a better place for people						
7. That people are basically good						
8. That the way our society works makes sense to you						
9. That you liked most parts of your personality						
10. Good at managing the responsibilities of your daily life						
11. That you had warm and trusting relationships with others						
12. That you have experiences that challenge you to grow and become a better person						
13. Confident to think or express your own ideas and opinions						
14. That your life has a sense of direction or meaning to it						

Addendum C: Permission from the Faculty of Education to conduct research



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS
Faculty of Education Sciences
Faculty Research Administration
Reference nr: 9.4

FAKULTEIT OPVOEDINGSWETENSKAPPE / FACULTY OF EDUCATION SCIENCES

Notule / Minutes

Vergadering / Meeting

M&D Programkomitee / M&D Programme Committee

Datum / Date: Donderdag 22 September 2016, 9:00 / Thursday, 22 September 2016, 9:00

Plek / Venue: Seminaarlokaal 225A, gebou C6 / Seminar room 225A, building C6

ITEM	
<p>1 Presensie en personalia / Attendance and personalia</p> <p>Presensie / Attendance: Dr L Postma (voorsitter/chair), Proff/Profs B Breed, dr/Drs L de Sousa, S Nieuwoudt, L White, C van der Westhuizen.</p> <p>Ad hoc lede / Ad hoc members: Proff/Profs M Smit, A Golightly, dr/Dr CP van der Vyver.</p> <p>Notulehouer / Minute keeper: Me/Ms E Greyling</p> <p>Administratief / Administrative: Me/Ms D Legoete</p> <p>Verskoning / Apology: Prof JP Rossouw, mnr/Mr J Liebenberg.</p>	
<p>2 MEd-sake / MEd matters</p>	
<p>2.1.1 Student/Student</p> <p>Graad/Degree</p> <p>Titel/Title</p> <p>Studieleier/Supervisor</p> <p>Mede-studieleier/Co-supervisor</p> <p>Werkverdeling/Work distribution</p> <p>Besluit/Decision</p>	<p>Me/Ms E Mong (21534004)</p> <p>Opvoedkundige Sielkunde / Educational Psychology</p> <p>The prevalence and nature of cyberbullying and its effects on the mental well-being of Grade 9 learners</p> <p>Dr D Kirsten</p> <p>Dr A de Wet</p> <p>Dr Corné van der Vyver Dr Susan Nieuwoudt</p> <p>Goedgekeur, maar gee aandag aan die volgende punte:</p> <ul style="list-style-type: none"> Die titel kan heroorweeg word. Voorstel: "Cyberbullying and its effects on the mental well-being of Grade 9 learners" Dit is 'n goeie voorlegging. Punt 3.4 ("research questions") – Die doelstellings en navorsingsvrae behoort belynt te wees. Een sentrale navorsingsvraag lei tot een "overall" of "central aim". Sekondêre navorsingsvrae gee dan aanleiding tot ooreenstemmende "objectives". Die voorlegging begin ietwat stomp met "keywords". Voorstel: Begin met 'n inleidende paragraaf wat die leser in kennis stel van wat in die voorlegging staan/ of iets soortgelyk. Wees versigtig vir te min bronne (sommige "Keywords" is breedvoerig verklaar terwyl ander min aandag gekry het).

- "Sampling strategy": voorstel om "*Stratified random sample of Cluster sample*" te doen. Gee meer inligting/stel dit duideliker.
- "*15 schools will be randomly selected*". Heroorweeg die manier van die seleksie van skole. Motiveer duidelik die seleksie van skole.

Notulehouer / Minute keeper: Me/Ms E Greyling

Addendum D: Permission from HREC to conduct research



Dr D Kirsten
Educational Psychology
COMBER

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

**Health Sciences Ethics Office for Research,
Training and Support**

Health Research Ethics Committee (HREC)
Tel: 018-285 2291
Email: Wayne.Towers@nwu.ac.za

27 September 2018

Dear Dr Kirsten

APPROVAL OF YOUR APPLICATION BY THE HEALTH RESEARCH ETHICS COMMITTEE (HREC) OF THE FACULTY OF HEALTH SCIENCES

Ethics number: NWU-00009-17-S1

Kindly use the ethics reference number provided above in all future correspondence or documents submitted to the administrative assistant of the Health Research Ethics Committee (HREC) secretariat.

Study title: Cyberbullying and its effects on the mental well-being of adolescents

Study leader: Dr D Kirsten

Student: E Mong-21534004

Application type: Single study

Risk level: Children: Category 3-Greater than minimal with no direct benefit (monitoring report required six-monthly)

Expiry date: 30 September 2019 (monitoring report is due at the end of March and September annually until completion)

You are kindly informed that after review by the HREC, Faculty of Health Sciences, North-West University, your ethics approval application has been successful and was determined to fulfil all requirements for approval. Your study is approved for a year and may commence from 27/09/2018. Continuation of the study is dependent on receipt of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation. A monitoring report should be submitted two months prior to the reporting dates as indicated i.e. annually for minimal risk studies, six-monthly for medium risk studies and three-monthly for high risk studies, to ensure timely renewal of the study. A final report must be provided at completion of the study or the HREC, Faculty of Health Sciences must be notified if the study is temporarily suspended or terminated. The monitoring report template is obtainable from the Faculty of Health Sciences Ethics Office for Research, Training and Support at Ethics-HRECMonitoring@nwu.ac.za. Annually, a number of studies may be randomly selected for an internal audit.

The HREC, Faculty of Health Sciences requires immediate reporting of any aspects that warrants a change of ethical approval. Any amendments, extensions or other modifications to the proposal or other associated documentation must be submitted to the HREC, Faculty of Health Sciences prior to implementing these changes. These requests should be submitted to Ethics-HRECAppl@nwu.ac.za with a cover letter with a specific subject title indicating, "Amendment request: NWU-XXXXX-XX-XX". The letter should include the title of the approved study, the names of the researchers involved, the nature of the amendment/s being made (indicating what changes have been made as well as where they have been made), which documents have been attached and any further explanation to clarify the amendment request being submitted. The amendments made should be indicated in **yellow highlight** in the amended documents. The e-mail, to which you attach the documents that you send, should have a *specific subject line* indicating that it is an amendment request e.g. "Amendment request: NWU-XXXXX-XX-XX". This e-mail should indicate the nature of the amendment. This submission will be handled via the expedited process.

Any adverse/unexpected/unforeseen events or incidents must be reported on either an adverse event report form or incident report form to Ethics-HRECIncident-SAE@nwu.ac.za. The e-mail, to which you attach the documents that you send, should have a specific subject line indicating that it is a notification of a serious adverse event or incident in a specific project e.g. "SAE/Incident notification: NWU-XXXXX-XX-XX". Please note that the HREC, Faculty of Health Sciences has the prerogative and authority to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process.

The HREC, Faculty of Health Sciences complies with the South African National Health Act 61 (2003), the Regulations on Research with Human Participants (2014), the Ethics in Health Research: Principles, Structures and Processes (2015), the Belmont Report and the Declaration of Helsinki (2013).

We wish you the best as you conduct your research. If you have any questions or need further assistance, please contact the Faculty of Health Sciences Ethics Office for Research, Training and Support at Ethics-HRECApply@nwu.ac.za.

Yours sincerely



Prof Wayne Towers
HREC Chairperson



Prof Minnie Greeff
Ethics Office Head

Addendum E: Ministerial consent to conduct research

Addendum E

Ministerial consent: Form A

Investigators Details

Name of principal investigator:	Dr DK Kirsten
Title of research protocol:	Cyberbullying and its effects on the mental well-being of Grade 9 learners
Institutional Affiliation:	North-West University
Postal Address:	Private Bag X6001, Potchefstroom South Africa 2520
Physical Address:	North-West University 11 Hoffman street Potchefstroom 2531
E-mail:	doret.kirsten@nwu.ac.za
Phone:	018 299 4766
Fax:	
Date of application:	24 March 2017
Signature of applicant:	

APPLICATION:**1. Condition 1: The research objectives cannot be achieved except by the participation of minors**

Cyberbullying is a phenomenon that affects people in all spheres of life - children, students and adults. However, it is important to note that adolescents are challenged with the forming of their identity (Feldman, 2014). Adolescents attempt to determine what makes them unique and which roles they have to play in society. If adolescents fail to resolve this stage they might adopt improper social roles and struggle to form acceptable identities (ibid). Cassidy (2009) asserts that victims of bullying often have poor self-esteem and struggle to form their identity. Moreover, Antoniadou and Kokkinos (2015) state that the bullies often struggle with low self-esteem as well. Possible motives why they bully is to improve their self-esteem and to explore new identities (ibid). Moreover, it is evident that learners between the ages of 15 and 16 years, are the most at risk to be exposed to cyberbullying (Tustin, Zulu & Basson, 2014). Therefore, it will not be possible to do the study on adults and to generalize the results to children in their adolescent phase.

2. Condition 2: The research is likely to lead to an improved scientific understanding of certain conditions, diseases or disorders affecting minors

This study will contribute to the existing knowledge of the prevalence, nature and effects of cyberbullying on the mental well-being of Grade 9 learners in the Matlosana Municipal area.

This research attempts to extend the knowledge of correlational relationships between cyberbullying and mental well-being and cyberbullying and depression. This knowledge can inform the development of the content of anti-bullying campaigns in schools.

3. Condition 3: Any consent given is in line with public policy

Permission to conduct the research will be obtained from the North-West University's Health Research Ethics Committee (HREC). Thereafter the researcher will seek permission from the North-West Department of Education and from the selected schools' principals and SGB's. The principals of these schools will act as gatekeepers for this study.

Children are a vulnerable population; therefore, they may never be forced to partake in research and their best interest is paramount in all cases (Children Act 38, 2005). Participants

and their parents must consequently be fully informed about the nature of the research. They must have a clear understanding that participation is voluntary and of their right to decline participation or to discontinue partaking at any time (Fraenkel et al., 2012). The prospective participants in this study are younger than 18 years, but older than 12 years, therefore their parents/caretakers will sign permission and the children will sign adolescent consent.

The above-mentioned is in line with policies on how children should be treated as research participants and also on how research should be conducted in order to be ethically sound.

4. Condition 4: The research does not pose a significant risk to minors, but the benefits of the research outweighs the risks

It is anticipated that some participants might experience discomfort while completing the survey, maybe realising that they do feel depressed, even suicidal or that their well-being is in a languishing status as a result of being a victim/perpetrator of cyberbullying. It could also be that they are not depressed or suicidal, but in despair because of cyberbullying. Lastly, just by completing this survey, participants might expect assistance from a counsellor or psychologist.

The risks of participation for the children can be seen as mild to moderate. Any foreseeable risk is restricted to the minimum, any permanent damage is avoided as far as possible and appropriate precautions and safety measures are in place. The principles of beneficence and non-maleficence are adhered to.

RISKS	PRECAUTIONS
Mild (1) Risk: Physical harm (Physical discomfort)	The participant will fill the online survey in, in the comfort of his/her own home and will be able to rest between answering questions.
Mild (1) Risk: Psychological (Coercion)	It will be made clear to the Life Orientation teachers when I train them for the consent process and to parents at the parent information meeting- coercion is not allowed. Participation is voluntarily. Free to withdraw at any time.

Mild (1) Risk: Psychological (Boredom)	Only the most essential questionnaires were chosen to keep it as short as possible.
Mild (1) Risk: Psychological (Inconvenience)	Participant fills in the survey in the comfort of own home
Mild (2) Risks: Psychological harm (Emotional distress, self-disclosure, embarrassment, anxiety, fear, sadness, anger, emotional trauma)	All responses are anonymous and confidential. At the end of the electronic survey there will be referral and emergency contact details. The participants that seek psychological help will be able to fill in their cell phone numbers at the end of the electronic survey and the study supervisor will contact them and refer them to either to one of the registered counsellors in training (NWU, Department of Educational Psychology) or to a registered counsellor or psychologist, depending on their specific need and financial situation.

The indirect benefits of the research are as follows:

- Awareness about the prevalence and nature of cyberbullying and its effects on mental well-being of adolescents is thus raised.
- The researcher will develop efficient coping mechanisms for victims and perpetrators of cyberbullying.
- Recommendations will be made regarding the implications of cyberbullying for schools - health promotion in schools are thus adhered to.
- Student registered counsellors will benefit from the opportunity in that it forms part of their work integrated learning. They will assist children in bettering societal wellbeing.

- If feedback on the results of the study is presented to the school in the form of a psycho-educational and awareness campaign it can support the school to be more aware of bullying and to do something to stop cyberbullying, hence making the school environment a safer place for all.

The indirect benefits of the research thus outweighs the risks.

BIBLIOGRAPHY

Antoniadou, N., & Kokkinos, C. M. (2015). Cyber and school bullying: same or different phenomena? *Aggression and violent behaviour, 25*, 363-372.

Cassidy, T. (2009). Bullying and victimisation in school children: the role of social identity, problem-solving style, and family and school context. *Social Psychology of Education, 12*, 63-76. doi: 10.1007/s11218-008-9066y


Feldman, R.S. (2014). *Child Development: a topical approach*. USA: Pearson.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). New York, NY: McGraw-Hill.

South Africa. (2005). *Childrens Act 38 of 2005*. Pretoria: Government Printer.

Tustin, D. H., Zulu, G. N., & Basson, A. (2014). Bullying among secondary school learners in South Africa with specific emphasis on cyberbullying. *Child Abuse Research: a South African Journal, 15*(2):13-25.

Addendum F: Permission from the Department of Education to conduct research

	Education and Sport Development Department of Education and Sport Development Departement van Onderwys en Sportontwikkeling Lefapha la Thuto le Tihabololo ya Metshameko NORTH WEST PROVINCE	Teemane Building, 8 O.R. Tambo Street, Potchefstroom Private Bag X1256, Potchefstroom 2520 Tel: (018) 299-8215 / Fax: 294-8204 e-mail: bmonale@nwpg.gov.za Office Manager: Linda Nelson - Tel: (018) 299-8264 e-mail: Lnelson@nwpg.gov.za
	OFFICE OF THE DISTRICT DIRECTOR Dr KENNETH KAUNDA DISTRICT	
Enquiry: Mphiliso Tyatya; 018 299 8264	Tel: (018) 299 8264/8256	e-mail : pyatya@nwpg.gov.za

19 July 2018

**To: Ms. Elmarie Mong
University of the North West
Faculty of Education Sciences**

**From: Mr. B. E. Monale
District Director**

PERMISSION FOR RESEARCH: "CYBERBULLYING AND ITS EFFECTS ON THE MENTAL WELLBEING OF ADOLESCENTS"


Reference is made to your e-mailed correspondence dated 10 June 2018 and addressed to the Department, which is a request for permission to conduct research under the above-stated topic.

Note that this letter of approval applies for the research work to be conducted at the following schools:

Confidential

Permission is hereby granted for you to conduct the research as per your request, subject to the following provisions:

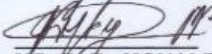
1. Considering that your research work will involve secondary school learners in identified schools around Matlosana Sub-district, it is directed that you take active steps to ensure that the research work itself should not compromise the normal school functionality.



"Towards Excellence in Education and Sport Development"

2. That the onus to make individual arrangements with your target schools rests with you, as this letter attests to approval already granted and Sub-district duly informed.
3. That the principle of confidentiality will be observed in its strictest terms.
4. That the research findings will be made available to the Department of Education & Sport Development in Dr. Kenneth Kaunda District upon request.

With our Best Wishes.



MR. B. E. MONALE
DISTRICT DIRECTOR
DR. KENNETH KAUNDA DISTRICT

Cc: Mr. H. Molefhe:
Matlosana Acting Sub-district Manager

Addendum G: Permission from school principals to conduct research



Private Bag X8001, Potchefstroom
South Africa 2520

Faculty of Education Sciences
Tel: 018- 299 4776
Email: doret.kirsten@nwu.ac.za

November 2018

.....

The School Governing Body

Dear

PERMISSION TO CONDUCT RESEARCH

TITLE OF THE RESEARCH STUDY: Cyberbullying and its effects on the mental wellbeing of adolescents.

ETHICS REFERENCE NUMBER: NWU-00009-17-S1

PRINCIPAL INVESTIGATOR: Dr Doret Kirsten, Study supervisor / Dr Annamagriet De Wet, Co-supervisor

POST GRADUATE STUDENT: Ms Elmaré Mong, MEd student

ADDRESS: North-West University, Faculty of Education Sciences, C6, Room 234, Potchefstroom Campus

CONTACT NUMBER (Dr Doret Kirsten: supervisor): 082 461 4464

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (**NWU-00009-17-S1**) and will be conducted according to the ethical guidelines and principles of *Ethics in Health Research: Principles, Processes and Structures* (DoH, 2015) and other international ethical guidelines applicable to this study. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

Dr Doret Kirsten is a registered Educational and Clinical Psychologist with the Health Professions Council of South Africa (HPCSA) and as supervisor of the study, she will ensure that the research adheres to the ethical guidelines of the Professional Board of Psychology.

The study group comprises of fifteen secondary schools in the Matlosana municipal district. Your school has been randomly selected. We herewith kindly request that you consider this study set to take place at your school in 2019.

We plan to investigate the following:

- How often adolescents experience cyberbullying;
- What types of cyberbullying adolescents experience;
- How cyberbullying affects the mental wellbeing of adolescents.

Research process that will be followed:

Please see Addendum A

Data collection:

After granting permission, you will act as the gatekeeper of this study. Should you give permission for your school to participate in this study, we kindly request the following:

- that the researcher addresses your learners during an assembly to inform them about the research study;
- that the Grade 8,9,10 and 11 Life Orientation teacher/s in your school act as the mediator/s for this study;
- that you allow the researcher to follow the research process in close collaboration with the Life Orientation teachers as put out in Addendum A. This entails two options for the learners to participate in this study:
 - they can either fill in an online survey – the researcher will send the link to the cell phone number that the learners and the learner's parent/guardian provide on the permission forms
 - OR
 - they can fill in a hard copy of the survey – the Life Orientation teachers will hand it to them, from there they can fill it in at home and drop it in the marked box that the researcher will provide at your school's reception.

The data will be collected quantitatively by means of an online survey/hard copy survey (**this will be done in the comfort of the learners own home, schools hours will thus not be affected**). The questionnaires included in the survey are as follows:

- Patient Health Questionnaire (PHQ-9)
- Mental Health Continuum - Short Form (MHC-SF)
- Adapted Daphne Bullying questionnaire

Risk level of the research:

The research has greater than minimal risk with no prospect of direct benefit to the child, but a high probability of providing generalizable knowledge. Any foreseeable risk is restricted to the minimum, any permanent damage is avoided as far as possible and appropriate precautions and safety measures are in place (see Table 1)

Table 1: Risks and precautions associated with the proposed study

RISKS	PRECAUTIONS
Mild (1) Risk: Physical harm (Physical discomfort)	The participant will complete the online/hard copy survey in the comfort of his/her own home and will be able to rest in between answering questions.
Mild (1) Risk: Psychological (Coercion)	It will be made clear to the Life Orientation teachers during training for the consent process that coercion is not allowed. Participation is voluntarily. Learners are free to withdraw at any time.
Mild (1) Risk: Psychological (Boredom)	Only the most essential questionnaires were chosen to keep the online survey as short as possible.
Mild (1) Risk: Psychological (Inconvenience)	Participants will complete the survey in the comfort of their own homes.
Mild (2) Risks: Psychological harm (Emotional distress, self-disclosure, embarrassment, anxiety, fear, sadness, anger, emotional trauma)	<ul style="list-style-type: none"> ❖ All responses are anonymous and confidential. ❖ Referral and emergency contact details will be available at the end of the electronic survey. ❖ The participants will be able to seek psychological help by providing their cell phone numbers at the end of the electronic survey. The study supervisor will contact these learners and will refer them either to one of the registered counsellors in training (NWU, Department of Educational Psychology), or to a registered counsellor or psychologist, depending on the learner's specific need and financial situation.

The indirect benefits of the research are as follows:

- Awareness is raised about the prevalence and nature of cyberbullying and its effects on mental well-being of adolescents.
- The researcher aims to develop efficient coping mechanisms for victims and perpetrators of cyberbullying.
- Recommendations will be made regarding the implications of cyberbullying for schools, which will promote health in schools.
- Student registered counsellors will benefit from the opportunity to assist learner since it will form part of their work-integrated learning. They will assist children in bettering their social wellbeing.
- If feedback on the results of the study is presented to the school in the form of a psycho-educational and awareness campaign, it can support the school by creating awareness of bullying and by guiding schools to do something to stop cyberbullying, hence making the school environment a safer place for all.
- Learners who feel that they need help with either their general wellbeing or with being bullied/cyberbullied, can indicate that they require help at the end of the survey. The supervisor will refer them to the registered counsellors in training at the Educational Psychology Department, NWU. These services will be free of charge.

Remuneration:

The learners will not be paid for participation to protect them from exploitation, commodification and coercion. However, there will be a lucky draw. Three learners will stand a chance to win PNA/Bargain Books vouchers to the value of R250.00.

Feedback to schools:

The school will receive the results of the study as soon as it has been analysed and reported. The identity of the participants and name of the school will not be made public in any research report or further publications.

More information:

You can contact the researchers if you have any further questions or have any problems.

- Dr Doret Kirsten (supervisor) 018 299 4766 or e-mail: doret.kirsten@nwu.ac.za
- Dr Annamagriet de Wet (co-supervisor) or e-mail: annamagriet.dewet@nwu.ac.za
- Ms Elmaré Mong (student) at 082 556 9112 or e-mail: elmaremongem@gmail.com

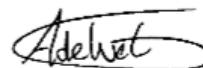
You can also contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 0182991206 or carolien.vanzyl@nwu.ac.za if you have any concerns about the research that have not been addressed by this correspondence or if you have complaints about the research.

Thanking you in anticipation for considering this request.

Yours sincerely



Dr DK Kirsten (supervisor)
Subject Group Educational Psychology
and Learning Support



Dr A De Wet (co-supervisor)
Subject Group Education Law



Ms E Mong (student)

PRINCIPAL PERMISSION

By signing below, I _____ (print name and surname of principal), of _____ (school) grant permission to Ms E Mong (MEd student, NWU) to conduct the research study: *Cyberbullying and its effects on the mental well-being of adolescents*

. I declare that:

- I have read the *permission to conduct research document* and I understand what this study is about.
- I will act as the **gatekeeper** of this study.
- The following teacher/ers will act as the **mediator/s** for this study:

Signed at (*place*) on (*date*) 20....

.....

Signature of principal

Addendum H: Permission from parents



Cyberbullying is causing increasing challenges to children, their parents and schools. Research is needed to find measures to address this societal problem. A research study, titled *Cyberbullying and its effects on the mental well-being of adolescents*, will be conducted at this school.



This study provides the opportunity for your child to help raise awareness about the prevalence and nature of cyberbullying as well as its effects on mental well-being of adolescents.



I would appreciate it if you as parent/guardian could please read the attached information letter regarding my study.



Thank you for your time!

Elmaré Mong (MEd student, NWU)

IF YOU ARE SATISFIED THAT YOU CLEARLY UNDERSTAND WHAT THIS RESEARCH IS ABOUT AND YOU **AGREE** THAT CHILD MAY PARTICIPATE, **PLEASE FILL IN THE PERMISSION SECTION.**

PLEASE KEEP THIS INFORMATION DOCUMENT FOR YOUR OWN RECORDS. **ONLY SEND THIS PAGE TO SCHOOL.**

IF YOU **DECLINE** PARTICIPATION: PLEASE RETURN THE **EMPTY FORM** TO SCHOOL.

By signing below, I

_____ (print name and surname of parent/caregiver),

agree that

_____ (print name and surname of participant)

may participate in the research study:

Cyberbullying and its effects on the mental well-being of adolescents

I declare that I have read the parent permission form. I understand what this study is about. My child does have his/her own phone and access to the internet either on his/her phone or somewhere else. My child participates voluntarily and is free to withdraw at any time. If my child indicates that he/she needs help the researcher will contact him/her and assist us in getting psychological help.

Email address: _____

Cell phone number: _____

Signed at (*place*) on (*date*) 20....

Signature of parent/caregiver



**PERMISSION DOCUMENT FOR PARENTS/CAREGIVERS
OF GRADE 8-11 LEARNERS IN THE MATLOSANA MUNICIPAL AREA**

Dear parent/caregiver

Your child is invited to take part in a research study that forms part of my Master's degree in Educational Psychology. Please read the information presented here, it explains the details of the study. It is very important that you clearly understand what this research is about.

TITLE OF THE RESEARCH STUDY: Cyberbullying and its effects on the mental well-being of adolescents.

ETHICS REFERENCE NUMBER: NWU-00009-17-S1

PRINCIPAL INVESTIGATOR: Dr Doret Kirsten, Study supervisor / Dr Annamagriet De Wet, Co-supervisor
[018 299 4766 or doret.kirsten@nwu.ac.za / annamagriet.dewet@nwu.ac.za]

POST GRADUATE STUDENT: Ms Elmaré Mong, MEd student
[082 556 9112 or elmare.mong@nwu.ac.za]

ADDRESS: North-West University, Faculty of Education, C6, Room 234, Potchefstroom campus

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (**NWU-00009-17-S1**) and will be conducted according to the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (DoH, 2015) and other international ethical guidelines applicable to this study. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

You can contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206 or carolien.vanzyl@nwu.ac.za if you have any concerns that were not answered about the research or if you have complaints about the research.

What is this research study all about?

We plan to research:

- How often cyberbullying occurs in adolescents;
- What types of cyberbullying occurs in adolescents;
- How cyberbullying affects the mental well-being of adolescents.

Traditional bullying is behaviour carried out by an individual, or a group, which is repeated over time in order to hurt, threaten or frighten another individual with the intention to cause distress. It is different from other aggressive behaviour because it involves an imbalance of power, which leaves the victim defenceless. Traditional bullying occurs in **physical space**.

Cyberbullying is a new form of bullying which involves the use of mobile phones (texts, calls, video clips) or the internet (e-mail, chat rooms, websites) or other forms of information and communication technology to deliberately harass, threaten, or intimidate someone. Cyberbullying occurs in **cyberspace**.

How does taking part in this study work?

- Your child can decide if he/she wants to take part in this study or not.
- Your child can leave this study at any time, even if your child does agree to take part now.
- If you agree that your child may participate, please provide an email address and cell phone number below where to the researcher can send the survey link (it is an online survey). The researcher will also bring the link to the Life Orientation teacher and he or she will be asked to hand it to your child.
- **IMPORTANT:** Since the study is about cyberbullying, your child needs to have his/her own phone and access to the internet either on his/her phone or somewhere else to participate in this study.

What will happen with the findings or samples?

- The findings of this study will only be used for this study and further research from this study.
- The results will be used to create education awareness about cyberbullying. It will help schools to develop an action plan against cyberbullying.
- The researcher does not know who gave a specific answer. Your child will not fill in his/her name on the survey.

How will your child know about the results of this research?

- Your child's school will receive a summary of the results. The results will be presented as the "voice" of learners in the Matlosana municipal district area. Your child's name or school's name will not appear anywhere.

Why has your child been invited to take part?

- Your child has been invited because he/she is a learner in the adolescent phase.
- This study focuses on adolescents between the ages of 12 and 17 years old.
- The Matlosana district was chosen as the research area.
- More or less 500 participants, boys and girls, will be included in this study.

What will your child be doing in this study?

- This online survey includes three short forms. **One** form is about your child's experiences with cyberbullying. The **two** other forms are about your child's level of mental health.
- It will take more or less 20 minutes to complete this survey.
- There are no right or wrong answers.

- Your child's name will not appear anywhere.

Will your child gain anything from taking part in this research?

- Your child will add to knowledge about cyberbullying and its effects on well-being.
- The researcher will attempt to develop ways in which victims and bullies can deal with cyberbullying (we call this coping mechanisms).
- The researcher will tell schools about the effects of cyberbullying and what they can do about it.

Are there risks involved in taking part in this research and how will they be prevented?

The risks

Minimal and mild to moderate risks are expected while and/or after filling in the questionnaires.

Risks	Safety measures
Physical discomfort / inconvenience	Your child can complete this online survey in the comfort of his/her own home. He/she will be able to rest in-between answering questions.
Being forced to participate	It was made clear to your child's Life Orientation teacher that no one may force your child to participate. He/she can decide to participate or not. He/she is free to withdraw at any time.
Boredom	Only necessary questionnaires were chosen to keep it as short as possible.
Emotional distress, self-disclosure, embarrassment, anxiety, fear, sadness, anger, emotional trauma	<p>The researcher does not know who gave a specific answer (anonymous). The researcher may not tell anyone who participated or what they answered (confidential).</p> <p>If your child feels that he/she needs help after he/she completed the survey, he/she can either use the referral and emergency contact details available at the end of the survey.</p> <p style="text-align: center;">OR</p> <p>Your child can fill in his/her cell phone number in the REQUESTING HELP block at the end of the survey. The study supervisor will contact your child and</p>

	refer to either one of the registered counsellors in training (NWU, Department of Educational Psychology) or to a registered counsellor or psychologist. Your child's specific need and your financial situation will be taken into account.
--	--

How will we protect your child's confidentiality and who will see your child's findings?

- Your child's identity will be protected because he/she will not write his/her name on this survey.
- Your child's privacy will be respected and your child's results will be kept confidential.
- Only the researchers and statistical services (NWU) will be able to look at responses. All electronic data will be password-protected. Data will be stored for five years.
- The findings of this study will only be used for this study and further publications based on this study.

Will your child be paid to take part in this study and are there any costs for you?

- **No**, your child will not be paid to take part in the study to protect him/her from being forced to participate and from being exploited.
HOWEVER:
- There is a lucky draw:
 - Three learners will stand a chance to win CNA vouchers to the value of R250.00. Your child can use the number that the researcher will send to your email address / cell phone number for this lucky draw. There is a space on the survey to fill the number in.
 - The researcher will throw all the numbers in a hat and randomly draw three numbers.
 - The three lucky learners will then be informed via an email that they won.
 - This number will not be linked to your child's name in any way, so the survey is still anonymous.
 - This is optional (Your child does not have to fill in the number).
- It will cost you nothing if your child does take part in this study.
- This study is not funded.

Addendum I: Adolescent assent



ADOLESCENT CONSENT DOCUMENT FOR GRADE 8-11 LEARNERS IN THE MATLOSANA MUNICIPAL AREA

Dear learner

You are invited to take part in a research study that forms part of my Master's degree in Educational Psychology. Please read the information presented here, it explains the details of the study. It is very important that you clearly understand what this research is about.

TITLE OF THE RESEARCH STUDY: Cyberbullying and its effects on the mental well-being of adolescents

ETHICS REFERENCE NUMBER: NWU-00009-17-S1

PRINCIPAL INVESTIGATOR: Dr Doret Kirsten, Study supervisor / Dr Annamagriet De Wet, Co-supervisor

POST GRADUATE STUDENT: Ms Elmaré Mong, MEd student

ADDRESS: North-West University, Faculty of Education Sciences, C6, Room 234, Potchefstroom campus

CONTACT NUMBER (supervisor): 018 299 4766

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (**NWU-00009-17-S1**) and will be conducted according to the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (DoH, 2015) and other international ethical guidelines applicable to this study. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

What is this research study all about?

We plan to research:

- how often cyberbullying occurs in adolescents;
- what types of cyberbullying occurs in adolescents;
- how cyberbullying affects the mental well-being of adolescents.

How does taking part in this study work?

- You can decide if you want to take part in this study or not.
- You can leave this study at any time, even if you do agree to take part now.

What will happen with the findings or samples?

- The findings of this study will only be used for this study and further research from this study.
- The results will be used to create education awareness about cyberbullying. It will help schools to develop an action plan against cyberbullying.

- The researcher does not know who gave a specific answer. You will not fill in your name on the survey.

How will you know about the results of this research?

- Your school will receive a summary of the results. The results will be presented as the "voice" of adolescents in the Matlosana municipal district areas. Your name or your school's name will not appear anywhere.

Why have you been invited to take part?

- You have been invited because you are an adolescent
- This study focuses on adolescents between the ages of 12 and 17 years old.
- The Matlosana districts were chosen as the research area.
- More or less 500 participants, boys and girls, will be included in this study.

What will you be doing in this study?

- There are two options to participate in this study:
 - You can fill in an online survey – I will send the link to the cell phone number that you and your parent/guardian provide OR
 - You can fill in a hard copy of the survey – your Life Orientation teacher will hand it to you and from there you fill it in at home and drop it in the marked box at your school's reception.
- This online/hard copy survey includes three short forms. **One** form is about your experiences with cyberbullying. The **two** other forms are about your level of mental health.
- It will take more or less 20 minutes to complete this survey.
- There are no right or wrong answers.
- Your name will not appear anywhere.

Will you gain anything from taking part in this research?

- You will add to knowledge about cyberbullying and its effects on well-being.
- The researcher will attempt to develop ways in which victims and bullies can deal with cyberbullying (we call this coping mechanisms).
- The researcher will tell schools about the effects of cyberbullying and what they can do about it.

Are there risks involved in taking part in this research and how will they be prevented?

The risks

Minimal and mild to moderate risks are expected while and/or after filling in the questionnaires.

Risks	Safety measures
Physical discomfort / inconvenience	You can complete this online survey in the comfort of your own home. You will be able to rest in-between answering questions.
Being forced to participate	It was made clear to your Life Orientation teacher and to your parents/caregivers at the parent information meeting that no one may force you to participate. You can decide to participate or not.

	You are free to withdraw at any time.
Boredom	Only necessary questionnaires were chosen to keep it as short as possible.
Emotional distress, self-disclosure, embarrassment, anxiety, fear, sadness, anger, emotional trauma	<p>The researcher does not know who gave a specific answer (anonymous). The researcher may not tell anyone who participated or what they answered (confidential).</p> <p>If you feel that you need help after you completed the survey, you can either use the referral and emergency contact details available at the end of the survey.</p> <p style="text-align: center;">OR</p> <p>You can fill in your cell phone number at the end of the survey. The study supervisor will contact you and refer you to either one of the registered counsellors in training (NWU, Department of Educational Psychology) or to a registered counsellor or psychologist. Your specific need and financial situation will be taken into account.</p>

How will we protect your confidentiality and who will see your findings?

- Your identity will be protected because you will not write your name on this survey.
- Your privacy will be respected and your results will be kept confidential.
- Only the researchers and statistical services (NWU) will be able to look at your response. All electronic data will be password-protected. Data will be stored for five years.
- The findings of this study will only be used for this study and further publications based on this study.

Will you be paid to take part in this study and are there any costs for you?

- No, you will not be paid to take part in the study to protect you from being forced to participate and from being exploited.
- HOWEVER:
 - There is a lucky draw:
 - Three learners will stand a chance to win CNA vouchers to the value of R250.00. You can use the number that will be sent to your cell phone number for this lucky draw. There is a space on the survey to fill the number in.
 - The researcher will throw all the numbers in a hat and randomly draw three numbers.
 - The three lucky learners will then be informed via an email that they won.
 - This number will not be linked to your name in any way, so the survey is still anonymous.
 - This is optional (You do not have to fill in the number).
- It will not cost you nothing if you do take part in this study.
- This study is not funded.

IF YOU ARE SATISFIED THAT YOU CLEARLY UNDERSTAND WHAT THIS RESEARCH IS ABOUT AND YOU **AGREE** TO PARTICIPATE, **PLEASE FILL IN THE SECTION BELOW.**

PLEASE KEEP THIS INFORMATION DOCUMENT FOR YOUR OWN RECORDS. **ONLY SEND THIS PAGE TO SCHOOL.**

IF YOU **DECLINE** PARTICIPATION: PLEASE RETURN THE **EMPTY FORM** TO SCHOOL.

By signing below, I

_____ (print name and surname of participant),

agree to participate in the research study:

Cyberbullying and its effects on the mental well-being of adolescents

I declare that I have read the information form and I understand what this study is about.

Signed at (*place*) on (*date*) 20....


Signature of learner

Addendum J: SADAG Depression flyer and permission to distribute the flyer

DEPRESSION AND ANXIETY

PANIC DISORDER
Panic attacks involve short times of terrifying fear, along with many physical symptoms. Your heart may pound, you may feel sick, dizzy, out of breath, scared, your fingers and legs may tingle, or have pain in your or chest. These things can happen unexpectedly when there is no obvious reason to feel fear or panic. Most people with panic disorder feel scared about having another panic attack and avoid places in which they believe these attacks are likely to occur again.

Treatment can help most people who have this illness. It is very important for the person who has panic disorder to get information about the problem, and the type of treatments that are able to help them.



WHO SUFFERS FROM PANIC DISORDER?
This disorder typically begins in young adulthood, but older people and children can be affected. Women are twice as likely to suffer from panic disorder than men. The disorder can be genetic.

SYMPTOMS
In the beginning, the first panic attack seems to come from nowhere. It can happen while a person is doing some everyday activity like being in a taxi, sitting at work or shopping. Suddenly, the person feels very frightened and terrified. This usually lasts for only a few minutes, but may feel longer.

The symptoms do disappear over an hour or so. People who have had a panic attack feel like they have been hit by some terrible illness or are "going crazy". Often people who are having a panic attack go to hospital for help in case it is a heart attack. The first panic attacks may occur when people are under a lot of stress from work or exams; after a trauma, or after the death of a family member.

The attacks may also follow surgery, a serious accident, illness or childbirth. Too much caffeine, the use of drugs or some medicines can also cause panic attacks.

ANXIETY SYMPTOMS

- Feeling frightened, scared
- Racing heart
- Chest pain
- Dizziness, feeling light headed
- Nausea
- Difficulty breathing
- Tingling and numbness in fingers, face and toes
- Hot flashes, cold sweats
- Feeling disoriented
- Fear of losing control, going 'crazy', or doing something embarrassing
- Fear of dying


COPING WITH PANIC

- Remember that although your feelings and symptoms are very frightening, they are not dangerous or harmful.
- Understand that what you are feeling is only a very strong feeling of your body's normal reaction to stress
- Don't fight your feelings or try to wish them away, the more you are willing to deal with them the less frightening they will become
- Concentrate on the present, where are you and who is with you. Remember that you are fine. Don't worry about what might happen to you. Get help and read about your illness
- Focus on an carry out simple things: talk to a friend, neighbour or co-worker, concentrate on counting backwards from 100 in 5s, smell a flower, or snap a rubber band to bring you back to the present

STRACES
If, after a time of feeling better, you suddenly have another panic attack, don't worry. After having suffered from panic attacks it is only natural that the attacks won't disappear all at once. In time, attacks will be less severe and you will learn not to be scared of them. There will be longer times between attacks before they stop altogether.

DEPRESSION AND ANXIETY

CAN AFFECT ANYBODY AT ANY TIME



HELPLINE
0800 21 22 23 www.sadag.org

HELPLINE
0800 21 22 23 www.sadag.org

Follow us:
Facebook [The South African Depression and Anxiety Group](#)
Twitter [@TheSADAG](#)

Dr. Reddy's

Dr. Reddy's Laboratories (Pty) Ltd. Reg. No. 2002/014163/07.
Third Floor, The Plaza, 1 Sandton Drive, Sandton 2196, South Africa.
Tel: +27 11 324 2100, Fax: +27 11 388 1262,
www.drreddys.co.za

This is supported unconditionally by Dr. Reddy's and the content and views are those of SADAG.

Many South Africans of all races, ages, sex, and cultures can suffer from depression and anxiety.

If you are one of these people, you are not alone. There is help for you.

DEPRESSION AND ANXIETY

Did you know that most people with depression don't get treatment? 1 in 10 people will suffer from depression at some point in their lives but only a quarter get help - even though treatment can take the depression away.


People often don't seek help because:

- Depression is often not seen as a real illness
- Many people blame themselves and think they are weak
- People are scared and too embarrassed to ask for help
- Depression is often confused with other illnesses

DEPRESSION SIGNS

- Feeling sad, anxious or "empty" most of the time
- Loss of interest or pleasure in hobbies and activities that were once enjoyed
- Feeling hopeless about life
- Feeling helpless or guilty
- Changes in sleeping habits
- Weight loss or weight gain
- Loss of energy, feeling "slow" or fatigued
- Thoughts of death or suicide, suicide attempts
- Restlessness, irritability, anger
- Difficulty concentrating, remembering things or making decisions
- Physical symptoms that don't respond to treatment, such as headaches, stomach pain, back pain, chest pain, even if it was checked by a doctor

NOT EVERYONE EXPERIENCES ALL OF THESE SYMPTOMS. SOME PEOPLE ONLY HAVE A FEW SYMPTOMS, OTHERS MAY HAVE MANY.




CAUSES OF DEPRESSION
Depression has many possible causes and is often brought on by a mixture of different factors. Sometimes a specific event may lead to depression; other times depression comes on for no apparent reason that you can see, even for people whose lives are going well. Some possible reasons include:

EXTERNAL EVENTS

- The break-up of a relationship, a traumatic event, financial worries, loneliness, legal problems, retirement, and grief can all result in depression.

FAMILY HISTORY

- Having a close family with depression means you are more likely to have depression as well.
- Depression can be caused by a chemical imbalance in the brain.
- Medical illness - like stroke, diabetes, HIV/AIDS, TB and others - can also trigger depression.
- Some medications or treatments can cause depression or make depression worse.



BIPOLAR SYMPTOMS

- Irritable angry mood
- Thinking very fast and talking so fast that others cannot understand you
- Little need for food
- Feelings of power, greatness
- Reckless behaviour with no thought of what might happen
- Spending too much money
- Risky sexual behaviour (no condom use, multiple partners)
- Abuse of alcohol or drugs
- Seeing or hearing things aren't there (in extreme cases)

TREATMENTS
Depression is one of the most treatable mental illnesses and 5 out of 10 people get totally better. You will need to have a complete medical check-up to make sure there are no other medical causes for how you are feeling.

ANTI-DEPRESSANTS
50% of people with depression will make good recovery on antidepressants. If one medicine doesn't work for you, try another one. Antidepressants do not work quickly - for most people it takes 2-3 weeks to start feeling better. It is very important not to stop taking the pills and to give them a full chance of working.

They may cause mild side effects like a dry mouth, sickness, headache or dizziness but these usually pass in a week or two. Never mix medications of any kind - prescription ones from the hospital, or ones from the pharmacy or ones you have bought - you must consult your doctor first. Always tell your doctor if you are pregnant or have any other illness like HIV and Aids.

Call your doctor if you have a question about any medicine or go to the clinic if you have a problem.


PSYCHOTHERAPY OR TALK THERAPY
Psychotherapy or talk therapy with a psychologist, social worker or counsellor gives people the skills to cope with their illness and the stress it causes.

SUPPORT GROUPS
Support groups are a very good way to get support and advice from people who know how you feel because they have felt the same way themselves. Support groups are run by patients for other patients in a safe place where you can share experiences and help. (Call SADAG 0800 21 22 23 for contacts in your area).

SELF-HELP
Self-help empowers you to cope better with your illness so that you can get well faster and stay healthy longer.

SELF-HELP TIPS:

- Understand what depression is - the more you know, the better you will cope.
- Do things to keep your mind busy - it can be of great help if the mind can be occupied by an interest or hobby or by reading a book or watching a TV programme or film.
- Avoid substances like smoking, drugs, and alcohol.
- Break large tasks into small ones and do what you can as you feel able to, do something small every day.
- Try to be with other people and talk about how you feel; it is usually better than being alone and secretive.
- Don't hide away or stay alone. See people, do things that make you feel better like going to a movie, sports match, or having tea with a friend.
- Remember: Depression is an illness and the way you feel is caused by the illness.
- Let your family and friends help you. Don't be afraid to ask for help if you need it.
- Expect your mood to improve slowly, feeling better takes time.



Mail Properties

From: "Admin" <admin@anxiety.org.za>
To: "'Elmaré Mong'" <Elmare.Mong@nwu.ac.za>
Subject: **FW: Permission to distribute leaflet**
Attachments: [SADAG_DEPRESSION_ANXIETY_LEAFLET_PRESS \(1\).pdf](#) (978 KB) [View](#)

Wednesday - November 6, 2019 12:42 PM

Dear Elmare,

Thank you for your email requesting permission to use the brochure from our website. You are certainly more than welcome to use all/any information from our website as long as you don't edit it in anyway. If possible, could you send us some photos and a reference letter on where the brochures were circulated, why etc – it is always nice to be able to add such to our various newsletter etc.

Another lovely resource for mental health materials is www.medinformer.co.za which has a variety of brochures available for download in pdf format for you to print and distribute.

Thanks so much,
Lyn

Lyn Labuschagne

The South African Depression and Anxiety Group (SADAG)

Tel: 011 234 4837 / 063 224 7025 | E-mail: admin@anxiety.org.za | Web: www.sadag.org



Addendum K: First and second amendment to sampling procedure



Dr D Kirsten
Educational Psychology
COMBER

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

Health Sciences Ethics Office for Research,
Training and Support

North-West University Health Research Ethics
Committee (NWU-HREC)
Tel: 018-285 2291
Email: Wayne.Towers@nwu.ac.za

10 March 2019

Dear Dr Kirsten

APPROVAL OF YOUR AMENDMENT REQUEST BY THE NORTH-WEST UNIVERSITY HEALTH RESEARCH ETHICS COMMITTEE (NWU-HREC) OF THE FACULTY OF HEALTH SCIENCES

Ethics number: NWU-00009-17-A1

Kindly use the ethics reference number provided above in all future correspondence or documents submitted to the administrative assistant of the North-West University Health Research Ethics Committee (NWU-HREC) secretariat.

Study title: Cyberbullying and its effects on the mental well-being of Grade 9 learners

Study leader/Researcher: Dr D Kirsten

Student: E Mong-21534004

You are kindly informed that your amendment request (Change in the data collection strategies to improve participation) to the aforementioned project has been approved. Any future amendments to the proposal or other associated documentation must be submitted to the NWU-HREC, Faculty of Health Sciences, North-West University, prior to implementing these changes. These requests should be electronically submitted to Ethics-HRECAppl@nwu.ac.za, for review BEFORE approval can be provided, with a cover letter with a specific subject title indicating, "Amendment request: NWU-XXXXX-XX-XX". The letter should include the title of the approved study, the names of the researchers involved, the nature of the amendment/s being made (indicating what changes have been made as well as where they have been made), which documents have been attached and any further explanation to clarify the amendment request being submitted. The amendments made should be indicated in **yellow highlight** in the amended documents. The *e-mail*, to which you attach the documents that you send, should have a *specific subject line* indicating that it is an amendment request e.g. "Amendment request: NWU-XXXXX-XX-XX". This e-mail should indicate the nature of the amendment. This submission will be handled via the expedited process.

We wish you the best as you conduct your research. If you have any questions or need further assistance, please contact the Faculty of Health Sciences Ethics Office for Research, Training and Support at Ethics-HRECAppl@nwu.ac.za.

Yours sincerely

Digitally signed by Wayne
Towers
Date: 2019.03.10
12:33:19 +02'00'

Prof Wayne Towers
Chairperson: NWU-HREC

Digitally signed by
Prof Minrie Greeff
Date: 2019.03.11
20:54:19 +02'00'

Prof Minrie Greeff
Head of Health Sciences Ethics
Office for Research, Training and
Support

Current details: (23239522) G:\My Drive\9_ Research and Postgraduate Education\9.1.5.3 Letters Templates\9.1.5.4.1_Approval_letter_Amend_Req_HREC.docm
30 April 2018

File reference: 9.1.5.4.1

Addendum L: Reminder of research participation



Faculty of Education Sciences
Subject Group Educational Psychology and
learners Support
Tel: 018- 299 4776
Email: doret.kirsten@nwu.ac.za

07/03/2019

Dear Parent and Learner



You as parent and your child already gave informed written permission in 2018 that your child may participate in the study, ***Cyberbullying and its effects on the mental well-being of adolescents*** (Ethics number: NWU-00009-17-S1).

In 2018, study participation could only be done with an online survey. The participation response was unfortunately very low due to the fact that data is expensive. If your child is still willing to participate, we would like to offer the following option to your child to ensure that he / she still has an equal chance to participate and that he / she is not excluded:

Please take out the hard copy of the questionnaire and fill it in at *home*. Do not write your name anywhere. Please put the filled-in questionnaire back in the envelope and throw the sealed envelope in your Life Orientation teacher's class in the marked box **[NWU]**.

This protects your privacy (you fill it in at home and no one knows specifically for which reason you are throwing an envelope in the box) and participation remains anonymous (you don't write down your name).

IMPORTANT:

If you no longer want to participate, you are not forced at all. Leave the questionnaire blank. Please return the sealed envelope in your Life Orientation teacher's class in the marked box **[NWU]**.

If you have already completed the questionnaire online, you do not need to do it again. *We thank you sincerely for your participation!* Leave the questionnaire blank. Please return the sealed envelope in your Life Orientation teacher's class in the marked box **[NWU]**.

The online option to participate is still available. Please follow the link:
<https://goo.gl/forms/RhDnUdyaa5kN68o42>

If your child feels that he/she needs help after he/she completed the survey, he/she can either use the referral and emergency contact details available at the end of the survey.

OR

Your child can fill in his/her cell phone number in the **REQUESTING HELP** block at the end of the survey. The study supervisor will contact your child and refer to either one of the registered counsellors in training (NWU, Department of Educational Psychology) or to a registered counsellor or psychologist. Your child's specific need and your financial situation will be taken into account.

We appreciate your willingness.



Dr DK Kirsten (supervisor)
Subject Group Educational
Psychology and Learning Support

Dr A De Wet (co-supervisor)
Subject Group Education Law

Ms E Mong
(Student)



Cyberbullying is causing increasing challenges to children, their parents and schools. Research is needed to find measures to address this societal problem. This study provides the opportunity for your child to help raise awareness about the prevalence and nature of cyberbullying as well as its effects on mental well-being of adolescents.



Addendum M: Permission to use Daphne Questionnaire

Mail From: Peter Smith <p.smith@gold.ac.uk>
 File Edit View Actions Tools Accounts Window Help
 Close Reply Reply All Forward Discussion Thread
 Properties Personalize Message Source Discussion Thread
 2016/02/22 05:31:49 PM
 From: Peter Smith <p.smith@gold.ac.uk>
 To: Elmare Mong
 Subject: Re: Request: Use of Daphne questionnaire

Dear Elmare

You are welcome to use the DAPHNE questionnaire with due acknowledgement. Actually there are 2 DAPHNE questionnaires, this one was used in the book chapter attached.

best wishes

Peter Smith

Peter K Smith (Emeritus Professor)
 Unit for School and Family Studies
 Department of Psychology
 Goldsmiths, University of London
 New Cross
 London SE14 6NW, England
 tel: +44-20-7919-7898
 fax: +44-20-7919-7873

Indian-European Research Network on Bullying, Cyberbullying, Pupil Safety and Wellbeing (2011-2015)
<http://ipesis.google.com/site/cyberbullyingandiac/>

Understanding Children's Development 6th edition (2015)
<http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1118729892.html>
 Understanding School Bullying: It's Nature and Prevention Strategies (2014)
www.uk.sagepub.com/books/book231197
 Emotional and Behavioural Difficulties associated with Bullying and Cyberbullying (2014)
www.psyp.oxs.ox.ac.uk/books/details/9780415634984/

Message DAPHNE c02.pdf L flyer

Addendum N: Declaration of Language Editing

Director: CME Terblanche - BA (Pol Sc), BA Hons (Eng), MA (Eng), TETL
22 Strydom Street Tel 082 821 3083
Baillie Park, 2531 cumlaudelanguage@gmail.com

DECLARATION OF LANGUAGE EDITING

I, Christina Maria Etrechia Terblanche, hereby declare that I edited the
research study titled:

Cyberbullying and its effects on the mental well-being of adolescents

for E. Mong for the purpose of submission as a postgraduate research
study. Changes were indicated in track changes and implementation was
left to the author.

Regards,

A handwritten signature in black ink that reads 'CME Terblanche'.

CME Terblanche

Cum Laude Language Practitioners (CC)

South African Translators Institute accr nr: 1001066

Full member of the Professional Editors Guild